Full wwPDB X-ray Structure Validation Report ⓘ

Nov 6, 2023 – 07:56 PM EST

PDB ID	:	8FC2
Title	:	Crystal structure of the Thermus thermophilus 70S ribosome in complex with protein Y, hygromycin A, and azithromycin at 2.50A resolution
Authors	:	Chen, C.-W.; Syroegin, E.A.; Svetlov, M.S.; Polikanov, Y.S.
Deposited on	:	2022-12-01
Resolution	:	2.50 Å(reported)

This is a Full wwPDB X-ray Structure Validation Report for a publicly released PDB entry.

We welcome your comments at *validation@mail.wwpdb.org*
A user guide is available at
https://www.wwpdb.org/validation/2017/XrayValidationReportHelp
with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at
http://www.wwpdb.org/validation/2017/FAQs#types.

The following versions of software and data (see references ⓘ) were used in the production of this report:

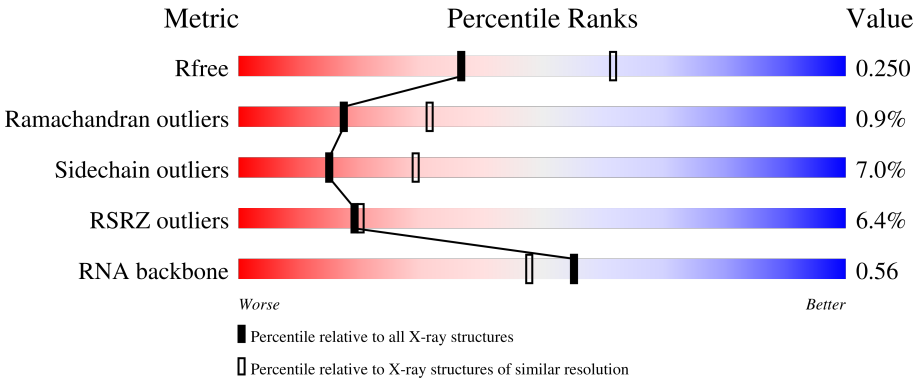
MolProbity	:	4.02b-467
Mogul	:	1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix)	:	1.13
EDS	:	2.36
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac	:	5.8.0158
CCP4	:	7.0.044 (Gargrove)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.36

1 Overall quality at a glance (i)

The following experimental techniques were used to determine the structure:
X-RAY DIFFRACTION

The reported resolution of this entry is 2.50 Å.

Percentile scores (ranging between 0-100) for global validation metrics of the entry are shown in the following graphic. The table shows the number of entries on which the scores are based.



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	130704	4661 (2.50-2.50)
Ramachandran outliers	138981	5231 (2.50-2.50)
Sidechain outliers	138945	5233 (2.50-2.50)
RSRZ outliers	127900	4559 (2.50-2.50)
RNA backbone	3102	1008 (2.84-2.16)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments of the lower bar indicate the fraction of residues that contain outliers for >=3, 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions <=5% The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density. The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	1A	2915	3% 83% 15%
1	2A	2915	4% 81% 17%
2	1B	121	88% 11%
2	2B	121	84% 15%
3	1D	276	2% 93% 7%

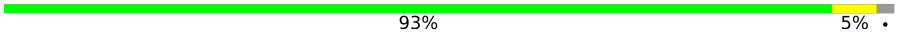
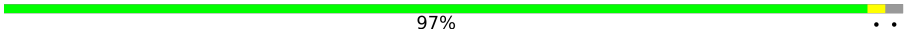
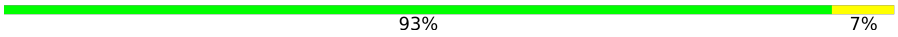
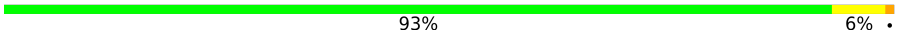
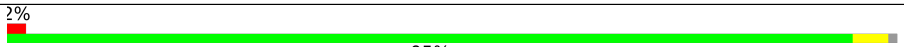
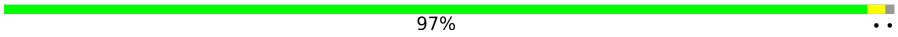
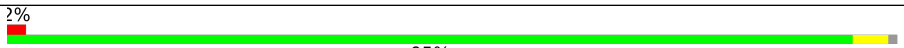
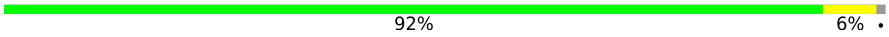
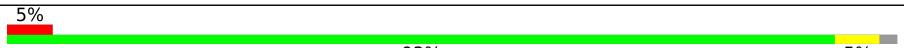
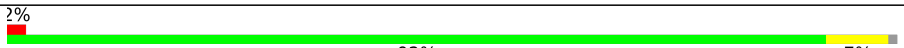
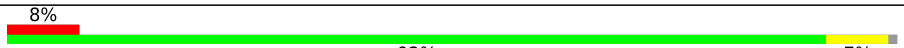
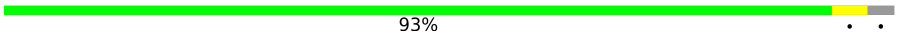
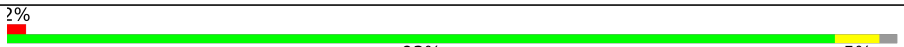
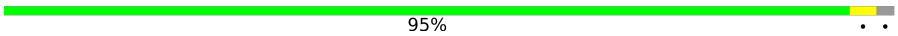
Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
3	2D	276	4% 94% 6%
4	1E	206	% 95%
4	2E	206	2% 94% 5%
5	1F	210	88% 9%
5	2F	210	87% 10%
6	1G	182	4% 91% 8%
6	2G	182	14% 90% 10%
7	1H	180	% 93%
7	2H	180	35% 91% 6%
8	1I	148	3% 93% 6%
8	2I	148	13% 91% 7%
9	1N	140	94% 6%
9	2N	140	3% 95% 5%
10	1O	122	98%
10	2O	122	2% 97%
11	1P	150	% 95% 5%
11	2P	150	4% 95% 5%
12	1Q	141	94% 6%
12	2Q	141	4% 95% 5%
13	1R	118	% 93% 7%
13	2R	118	% 95% 5%
14	1S	112	% 93% 5%
14	2S	112	8% 89% 9%
15	1T	146	2% 84% 5% 10%
15	2T	146	5% 85% 5% 10%

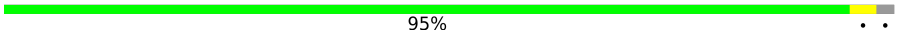
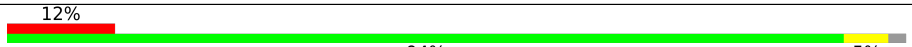
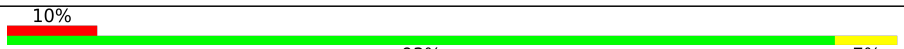
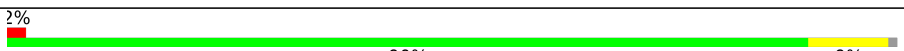
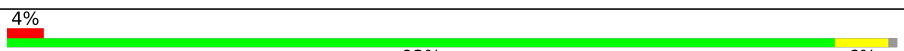
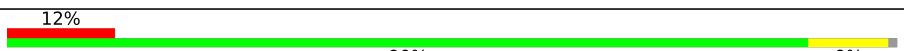
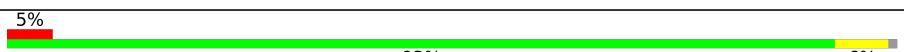
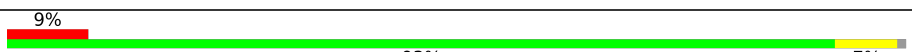
Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
16	1U	118	
16	2U	118	
17	1V	101	
17	2V	101	
18	1W	113	
18	2W	113	
19	1X	96	
19	2X	96	
20	1Y	110	
20	2Y	110	
21	1Z	206	
21	2Z	206	
22	10	85	
22	20	85	
23	11	98	
23	21	98	
24	12	72	
24	22	72	
25	13	60	
25	23	60	
26	14	71	
26	24	71	
27	15	60	
27	25	60	
28	16	54	

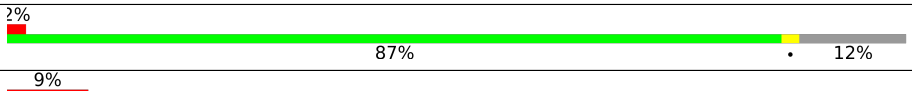
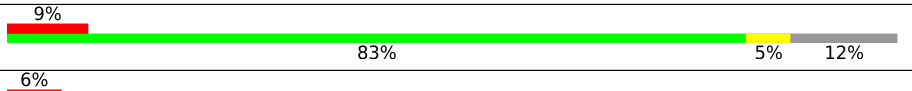
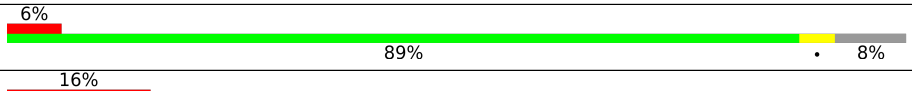
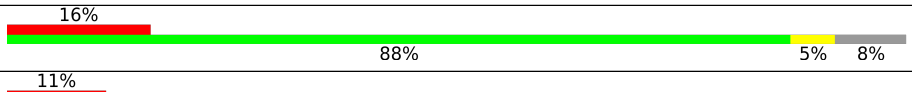
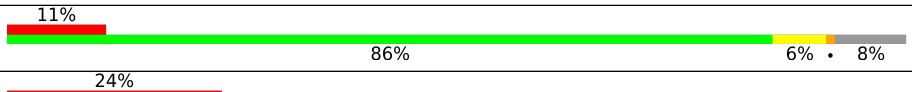
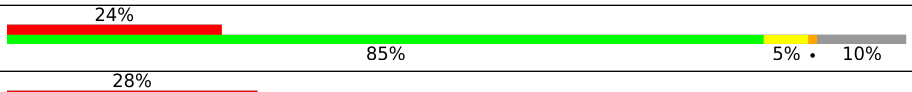
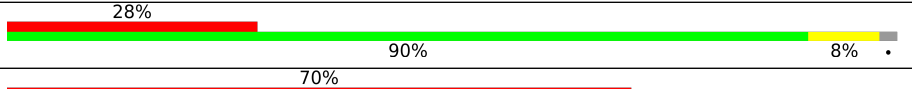
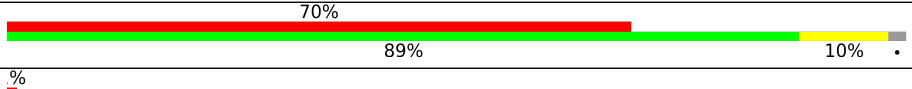
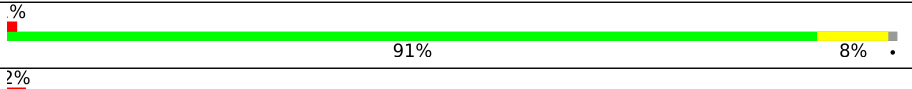
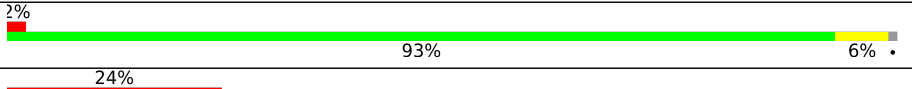
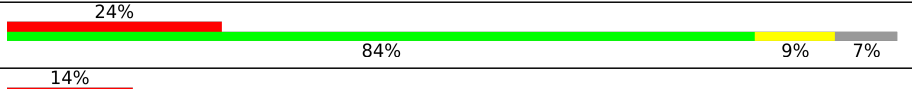
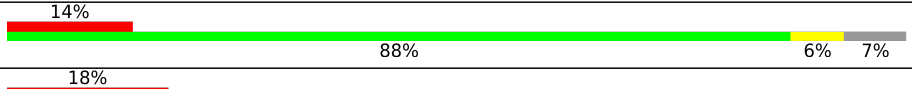
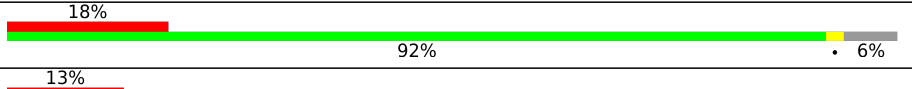
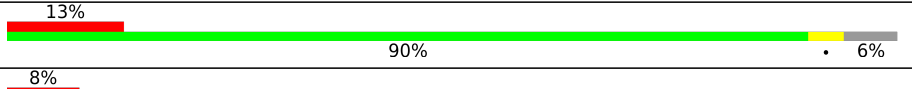
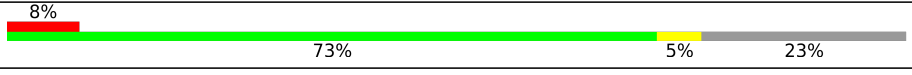
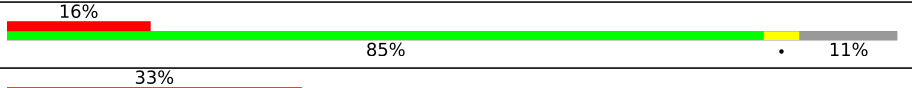
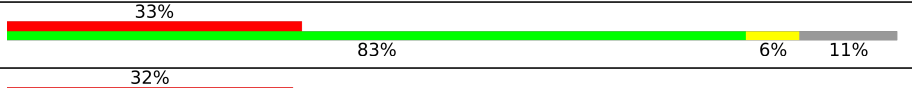
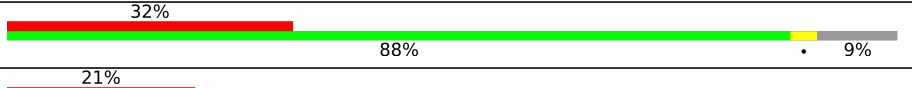
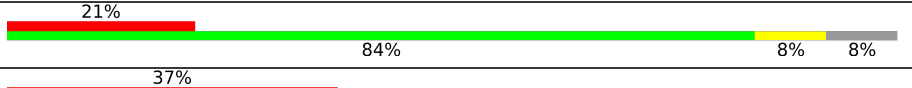
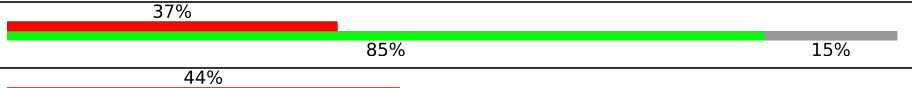
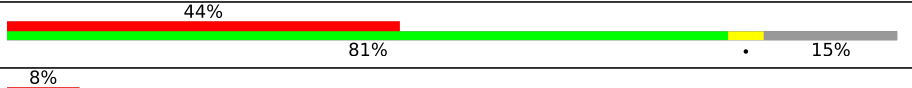
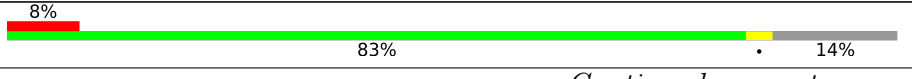
Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
28	26	54	
29	17	49	
29	27	49	
30	18	65	
30	28	65	
31	19	37	
31	29	37	
32	1a	1521	
32	2a	1521	
33	1b	256	
33	2b	256	
34	1c	239	
34	2c	239	
35	1d	209	
35	2d	209	
36	1e	162	
36	2e	162	
37	1f	101	
37	2f	101	
38	1g	156	
38	2g	156	
39	1h	138	
39	2h	138	
40	1i	128	
40	2i	128	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
41	1j	105	
41	2j	105	
42	1k	129	
42	2k	129	
43	1l	132	
43	2l	132	
44	1m	126	
44	2m	126	
45	1n	61	
45	2n	61	
46	1o	89	
46	2o	89	
47	1p	88	
47	2p	88	
48	1q	105	
48	2q	105	
49	1r	88	
49	2r	88	
50	1s	93	
50	2s	93	
51	1t	106	
51	2t	106	
52	1u	27	
52	2u	27	
53	1y	113	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
53	2y	113	

The following table lists non-polymeric compounds, carbohydrate monomers and non-standard residues in protein, DNA, RNA chains that are outliers for geometric or electron-density-fit criteria:

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
54	MG	1A	3680	-	-	-	X
54	MG	1A	3942	-	-	-	X
54	MG	1B	216	-	-	-	X
54	MG	1E	302	-	-	-	X
54	MG	1F	315	-	-	-	X
54	MG	2A	3072	-	-	-	X
54	MG	2A	3293	-	-	-	X
54	MG	2A	3463	-	-	-	X
54	MG	2A	3476	-	-	-	X

2 Entry composition

There are 61 unique types of molecules in this entry. The entry contains 296715 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, the ZeroOcc column contains the number of atoms modelled with zero occupancy, the AltConf column contains the number of residues with at least one atom in alternate conformation and the Trace column contains the number of residues modelled with at most 2 atoms.

- Molecule 1 is a RNA chain called 23S Ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	1A	2872	Total	C	N	O	P	0	0	0
			61869	27540	11574	19884	2871			
1	2A	2867	Total	C	N	O	P	0	0	0
			61758	27491	11552	19850	2865			

- Molecule 2 is a RNA chain called 5S Ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	1B	120	Total	C	N	O	P	0	0	0
			2572	1145	476	832	119			
2	2B	120	Total	C	N	O	P	0	0	0
			2573	1146	476	832	119			

- Molecule 3 is a protein called 50S ribosomal protein L2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	1D	275	Total	C	N	O	S	0	0	0
			2131	1346	422	360	3			
3	2D	275	Total	C	N	O	S	0	0	0
			2136	1349	423	361	3			

- Molecule 4 is a protein called 50S ribosomal protein L3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	1E	204	Total	C	N	O	S	0	0	0
			1559	985	298	270	6			
4	2E	204	Total	C	N	O	S	0	0	0
			1559	985	298	270	6			

- Molecule 5 is a protein called 50S ribosomal protein L4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	1F	203	Total	C	N	O	S	0	0	1
			1584	1009	298	275	2			
5	2F	203	Total	C	N	O	S	0	0	1
			1580	1007	297	274	2			

- Molecule 6 is a protein called 50S ribosomal protein L5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	1G	181	Total	C	N	O	S	0	0	0
			1426	916	253	253	4			
6	2G	181	Total	C	N	O	S	0	0	0
			1424	912	259	249	4			

- Molecule 7 is a protein called 50S ribosomal protein L6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	1H	174	Total	C	N	O	S	0	0	0
			1330	845	248	236	1			
7	2H	173	Total	C	N	O	S	0	0	0
			1324	842	247	234	1			

- Molecule 8 is a protein called 50S ribosomal protein L9.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	1I	147	Total	C	N	O	S	0	0	0
			1094	699	191	203	1			
8	2I	146	Total	C	N	O	S	0	0	0
			1076	687	186	202	1			

- Molecule 9 is a protein called 50S ribosomal protein L13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
9	1N	140	Total	C	N	O	S	0	0	0
			1121	722	208	187	4			
9	2N	140	Total	C	N	O	S	0	0	0
			1117	719	207	187	4			

- Molecule 10 is a protein called 50S ribosomal protein L14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	1O	122	Total	C	N	O	S	0	0	0
			933	588	171	170	4			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	2O	122	Total 933	C 588	N 171	O 170	S 4	0	0	0

- Molecule 11 is a protein called 50S ribosomal protein L15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	1P	149	Total 1135	C 706	N 230	O 196	S 3	0	0	0
11	2P	149	Total 1135	C 706	N 230	O 196	S 3	0	0	0

- Molecule 12 is a protein called 50S ribosomal protein L16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	1Q	141	Total 1122	C 715	N 212	O 188	S 7	0	0	0
12	2Q	141	Total 1122	C 715	N 212	O 188	S 7	0	0	0

- Molecule 13 is a protein called 50S ribosomal protein L17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	1R	118	Total 968	C 604	N 203	O 160	S 1	0	0	0
13	2R	118	Total 968	C 604	N 203	O 160	S 1	0	0	0

- Molecule 14 is a protein called 50S ribosomal protein L18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
14	1S	110	Total 877	C 553	N 175	O 149	0	0	0
14	2S	110	Total 870	C 549	N 173	O 148	0	0	0

- Molecule 15 is a protein called 50S ribosomal protein L19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	1T	131	Total 1091	C 680	N 225	O 185	S 1	0	0	0
15	2T	131	Total 1083	C 675	N 224	O 183	S 1	0	0	0

- Molecule 16 is a protein called 50S ribosomal protein L20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	1U	116	Total	C	N	O	S	0	0	0
			959	608	201	149	1			
16	2U	116	Total	C	N	O	S	0	0	0
			959	608	201	149	1			

- Molecule 17 is a protein called 50S ribosomal protein L21.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	1V	101	Total	C	N	O	S	0	0	0
			775	498	141	135	1			
17	2V	101	Total	C	N	O	S	0	0	0
			771	495	140	135	1			

- Molecule 18 is a protein called 50S ribosomal protein L22.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
18	1W	112	Total	C	N	O	S	0	0	0
			886	557	174	153	2			
18	2W	112	Total	C	N	O	S	0	0	0
			886	557	174	153	2			

- Molecule 19 is a protein called 50S ribosomal protein L23.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	1X	95	Total	C	N	O	S	0	0	0
			750	488	135	126	1			
19	2X	95	Total	C	N	O	S	0	0	0
			750	488	135	126	1			

- Molecule 20 is a protein called 50S ribosomal protein L24.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	1Y	107	Total	C	N	O	S	0	0	0
			810	520	153	131	6			
20	2Y	107	Total	C	N	O	S	0	0	0
			810	519	153	132	6			

- Molecule 21 is a protein called 50S ribosomal protein L25.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
21	1Z	203	Total	C	N	O	S	0	0	0
			1587	1011	282	292	2			
21	2Z	201	Total	C	N	O	S	0	0	0
			1557	995	274	286	2			

- Molecule 22 is a protein called 50S ribosomal protein L27.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	10	77	Total	C	N	O	S	0	0	0
			608	375	129	103	1			
22	20	77	Total	C	N	O	S	0	0	0
			608	375	129	103	1			

- Molecule 23 is a protein called 50S ribosomal protein L28.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
23	11	97	Total	C	N	O	S	0	0	0
			754	475	148	130	1			
23	21	97	Total	C	N	O	S	0	0	0
			759	478	149	131	1			

- Molecule 24 is a protein called 50S ribosomal protein L29.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
24	12	70	Total	C	N	O	S	0	0	0
			588	365	118	103	2			
24	22	70	Total	C	N	O	S	0	0	0
			592	368	119	103	2			

- Molecule 25 is a protein called 50S ribosomal protein L30.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
25	13	59	Total	C	N	O	0	0	0
			469	298	90	81			
25	23	59	Total	C	N	O	0	0	0
			464	296	90	78			

- Molecule 26 is a protein called 50S ribosomal protein L31.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	14	69	Total	C	N	O	S	0	0	0
			546	346	96	99	5			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	24	69	Total	C	N	O	S	0	0	0
			536	342	98	91	5			

- Molecule 27 is a protein called 50S ribosomal protein L32.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
27	15	59	Total	C	N	O	S	0	0	0
			459	288	90	76	5			
27	25	59	Total	C	N	O	S	0	0	0
			455	285	89	76	5			

- Molecule 28 is a protein called 50S ribosomal protein L33.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
28	16	53	Total	C	N	O	S	0	0	0
			453	281	91	77	4			
28	26	53	Total	C	N	O	S	0	0	0
			449	279	91	75	4			

- Molecule 29 is a protein called 50S ribosomal protein L34.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
29	17	48	Total	C	N	O	S	0	0	0
			418	257	104	55	2			
29	27	48	Total	C	N	O	S	0	0	0
			418	257	104	55	2			

- Molecule 30 is a protein called 50S ribosomal protein L35.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	18	64	Total	C	N	O	S	0	0	0
			517	331	102	82	2			
30	28	64	Total	C	N	O	S	0	0	0
			517	331	102	82	2			

- Molecule 31 is a protein called 50S ribosomal protein L36.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
31	19	37	Total	C	N	O	S	0	0	0
			307	188	68	47	4			
31	29	37	Total	C	N	O	S	0	0	0
			307	188	68	47	4			

- Molecule 32 is a RNA chain called 16S Ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
32	1a	1500	Total	C	N	O	P	0	0	0
			32246	14358	5975	10413	1500			
32	2a	1504	Total	C	N	O	P	0	0	0
			32331	14396	5990	10441	1504			

- Molecule 33 is a protein called 30S ribosomal protein S2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
33	1b	231	Total	C	N	O	S	0	0	0
			1842	1175	330	332	5			
33	2b	231	Total	C	N	O	S	0	0	0
			1825	1167	326	327	5			

- Molecule 34 is a protein called 30S ribosomal protein S3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
34	1c	206	Total	C	N	O	S	0	0	0
			1558	979	305	273	1			
34	2c	206	Total	C	N	O	S	0	0	0
			1542	968	300	273	1			

- Molecule 35 is a protein called 30S ribosomal protein S4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
35	1d	208	Total	C	N	O	S	0	0	0
			1665	1043	329	286	7			
35	2d	208	Total	C	N	O	S	0	0	0
			1668	1047	330	284	7			

- Molecule 36 is a protein called 30S ribosomal protein S5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
36	1e	148	Total	C	N	O	S	0	0	0
			1133	716	214	199	4			
36	2e	148	Total	C	N	O	S	0	0	0
			1133	716	214	199	4			

- Molecule 37 is a protein called 30S ribosomal protein S6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
37	1f	100	Total	C	N	O	S	0	0	0
			814	516	144	151	3			
37	2f	100	Total	C	N	O	S	0	0	0
			816	516	146	151	3			

- Molecule 38 is a protein called 30S ribosomal protein S7.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
38	1g	155	Total	C	N	O	S	0	0	0
			1235	769	244	216	6			
38	2g	155	Total	C	N	O	S	0	0	0
			1229	766	241	216	6			

- Molecule 39 is a protein called 30S ribosomal protein S8.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
39	1h	137	Total	C	N	O	S	0	0	0
			1098	694	210	192	2			
39	2h	137	Total	C	N	O	S	0	0	0
			1088	689	206	191	2			

- Molecule 40 is a protein called 30S ribosomal protein S9.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
40	1i	127	Total	C	N	O	0	0	0
			986	625	193	168			
40	2i	126	Total	C	N	O	0	0	0
			966	613	186	167			

- Molecule 41 is a protein called 30S ribosomal protein S10.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
41	1j	97	Total	C	N	O	0	0	0
			719	446	142	131			
41	2j	96	Total	C	N	O	0	0	0
			710	442	137	131			

- Molecule 42 is a protein called 30S ribosomal protein S11.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	1k	114	Total	C	N	O	S	0	0	0
			834	520	156	155	3			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	2k	114	Total	C	N	O	S	0	0	0
			833	519	156	155	3			

- Molecule 43 is a protein called 30S ribosomal protein S12.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
43	1l	122	Total	C	N	O	S	0	0	0
			932	586	185	159	2			
43	2l	122	Total	C	N	O	S	0	0	0
			932	586	185	159	2			

- Molecule 44 is a protein called 30S ribosomal protein S13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
44	1m	116	Total	C	N	O	S	0	0	0
			914	564	189	159	2			
44	2m	114	Total	C	N	O	S	0	0	0
			895	550	186	157	2			

- Molecule 45 is a protein called 30S ribosomal protein S14 type Z.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
45	1n	60	Total	C	N	O	S	0	0	0
			492	312	104	72	4			
45	2n	60	Total	C	N	O	S	0	0	0
			492	312	104	72	4			

- Molecule 46 is a protein called 30S ribosomal protein S15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
46	1o	88	Total	C	N	O	S	0	0	0
			728	456	144	126	2			
46	2o	88	Total	C	N	O	S	0	0	0
			728	456	144	126	2			

- Molecule 47 is a protein called 30S ribosomal protein S16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
47	1p	82	Total	C	N	O	S	0	0	0
			681	433	134	113	1			
47	2p	82	Total	C	N	O	S	0	0	0
			677	430	133	113	1			

- Molecule 48 is a protein called 30S ribosomal protein S17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
48	1q	99	Total	C	N	O	S	0	0	0
			823	528	151	142	2			
48	2q	99	Total	C	N	O	S	0	0	0
			823	528	151	142	2			

- Molecule 49 is a protein called 30S ribosomal protein S18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
49	1r	68	Total	C	N	O	0	0	0
			555	355	108	92			
49	2r	68	Total	C	N	O	0	0	0
			555	355	108	92			

- Molecule 50 is a protein called 30S ribosomal protein S19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
50	1s	83	Total	C	N	O	S	0	0	0
			648	415	120	111	2			
50	2s	83	Total	C	N	O	S	0	0	0
			645	410	118	115	2			

- Molecule 51 is a protein called 30S ribosomal protein S20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
51	1t	96	Total	C	N	O	S	0	0	0
			732	449	157	124	2			
51	2t	98	Total	C	N	O	S	0	0	0
			733	451	154	126	2			

- Molecule 52 is a protein called 30S ribosomal protein Thx.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
52	1u	23	Total	C	N	O	0	0	0
			199	122	48	29			
52	2u	23	Total	C	N	O	0	0	0
			199	122	48	29			

- Molecule 53 is a protein called Ribosome-associated inhibitor A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
53	1y	97	Total 764	C 478	N 144	O 139	S 3	0	0	0
53	2y	96	Total 749	C 468	N 141	O 137	S 3	0	0	0

- Molecule 54 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
54	1A	1021	Total 1021	Mg 1021	0	0
54	1B	29	Total 29	Mg 29	0	0
54	1D	20	Total 20	Mg 20	0	0
54	1E	10	Total 10	Mg 10	0	0
54	1F	17	Total 17	Mg 17	0	0
54	1G	4	Total 4	Mg 4	0	0
54	1H	2	Total 2	Mg 2	0	0
54	1N	4	Total 4	Mg 4	0	0
54	1O	1	Total 1	Mg 1	0	0
54	1P	5	Total 5	Mg 5	0	0
54	1Q	5	Total 5	Mg 5	0	0
54	1R	8	Total 8	Mg 8	0	0
54	1T	3	Total 3	Mg 3	0	0
54	1U	6	Total 6	Mg 6	0	0
54	1V	6	Total 6	Mg 6	0	0
54	1W	4	Total 4	Mg 4	0	0
54	1Y	1	Total 1	Mg 1	0	0
54	1Z	1	Total 1	Mg 1	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
54	10	8	Total Mg 8 8	0	0
54	11	5	Total Mg 5 5	0	0
54	13	3	Total Mg 3 3	0	0
54	14	1	Total Mg 1 1	0	0
54	15	8	Total Mg 8 8	0	0
54	17	6	Total Mg 6 6	0	0
54	18	2	Total Mg 2 2	0	0
54	19	2	Total Mg 2 2	0	0
54	1a	281	Total Mg 281 281	0	0
54	1b	1	Total Mg 1 1	0	0
54	1d	4	Total Mg 4 4	0	0
54	1e	4	Total Mg 4 4	0	0
54	1f	2	Total Mg 2 2	0	0
54	1g	2	Total Mg 2 2	0	0
54	1h	2	Total Mg 2 2	0	0
54	1i	1	Total Mg 1 1	0	0
54	1k	1	Total Mg 1 1	0	0
54	1l	2	Total Mg 2 2	0	0
54	1m	1	Total Mg 1 1	0	0
54	1n	2	Total Mg 2 2	0	0
54	1o	2	Total Mg 2 2	0	0

Continued on next page...

Continued from previous page...

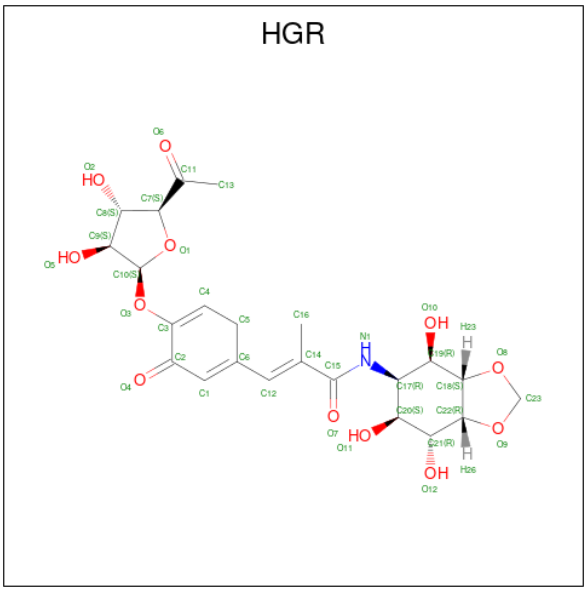
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
54	1t	1	Total Mg 1 1	0	0
54	1y	3	Total Mg 3 3	0	0
54	2A	729	Total Mg 729 729	0	0
54	2B	16	Total Mg 16 16	0	0
54	2D	12	Total Mg 12 12	0	0
54	2E	7	Total Mg 7 7	0	0
54	2F	4	Total Mg 4 4	0	0
54	2G	2	Total Mg 2 2	0	0
54	2I	2	Total Mg 2 2	0	0
54	2O	2	Total Mg 2 2	0	0
54	2P	2	Total Mg 2 2	0	0
54	2Q	3	Total Mg 3 3	0	0
54	2R	2	Total Mg 2 2	0	0
54	2T	4	Total Mg 4 4	0	0
54	2U	1	Total Mg 1 1	0	0
54	2V	3	Total Mg 3 3	0	0
54	2W	3	Total Mg 3 3	0	0
54	2X	1	Total Mg 1 1	0	0
54	2Y	1	Total Mg 1 1	0	0
54	20	3	Total Mg 3 3	0	0
54	21	1	Total Mg 1 1	0	0

Continued on next page...

Continued from previous page...

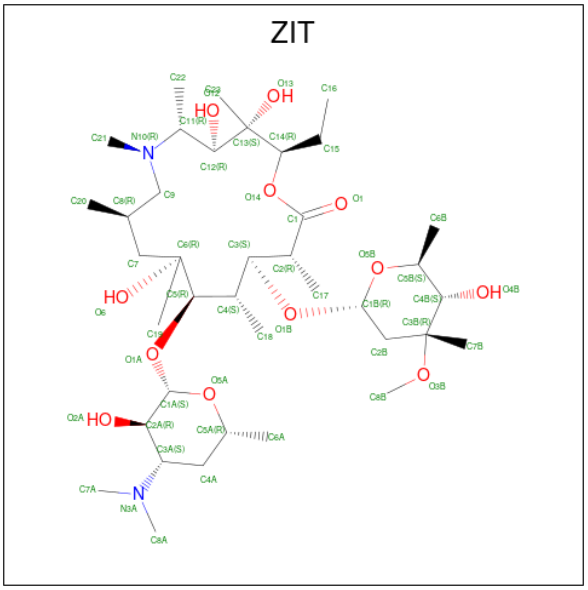
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
54	23	1	Total Mg 1 1	0	0
54	25	3	Total Mg 3 3	0	0
54	27	3	Total Mg 3 3	0	0
54	28	3	Total Mg 3 3	0	0
54	2a	193	Total Mg 193 193	0	0
54	2e	1	Total Mg 1 1	0	0
54	2f	1	Total Mg 1 1	0	0
54	2j	1	Total Mg 1 1	0	0
54	2k	1	Total Mg 1 1	0	0
54	2o	1	Total Mg 1 1	0	0
54	2t	1	Total Mg 1 1	0	0

- Molecule 55 is Hygromycin A (three-letter code: HGR) (formula: $C_{23}H_{29}NO_{12}$) (labeled as "Ligand of Interest" by depositor).



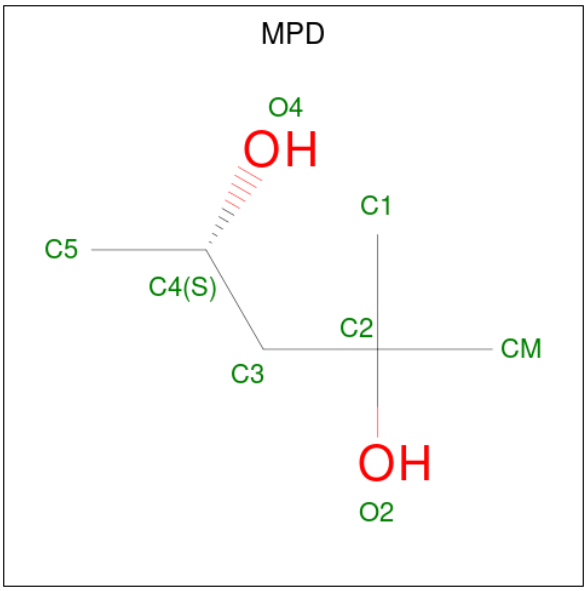
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
55	1A	1	Total C N O 36 23 1 12	0	0
55	2A	1	Total C N O 36 23 1 12	0	0

- Molecule 56 is AZITHROMYCIN (three-letter code: ZIT) (formula: $C_{38}H_{72}N_2O_{12}$) (labeled as "Ligand of Interest" by depositor).



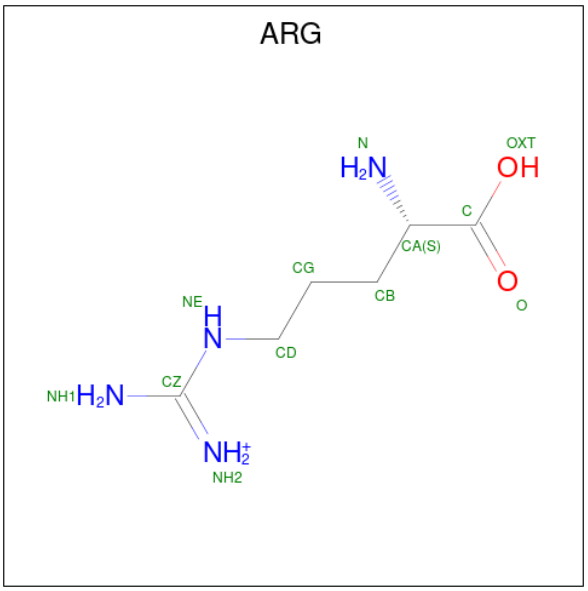
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
56	1A	1	Total C N O 52 38 2 12	0	0
56	2A	1	Total C N O 52 38 2 12	0	0

- Molecule 57 is (4S)-2-METHYL-2,4-PENTANEDIOL (three-letter code: MPD) (formula: $C_6H_{14}O_2$).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
57	1A	1	Total	C	O	0	0
			8	6	2		
57	1T	1	Total	C	O	0	0
			8	6	2		
57	18	1	Total	C	O	0	0
			8	6	2		
57	1a	1	Total	C	O	0	0
			8	6	2		
57	2A	1	Total	C	O	0	0
			8	6	2		
57	2A	1	Total	C	O	0	0
			8	6	2		
57	2B	1	Total	C	O	0	0
			8	6	2		

- Molecule 58 is ARGININE (three-letter code: ARG) (formula: $C_6H_{15}N_4O_2$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
58	1B	1	Total C N O 12 6 4 2	0	0
58	1F	1	Total C N O 12 6 4 2	0	0

- Molecule 59 is ZINC ION (three-letter code: ZN) (formula: Zn).

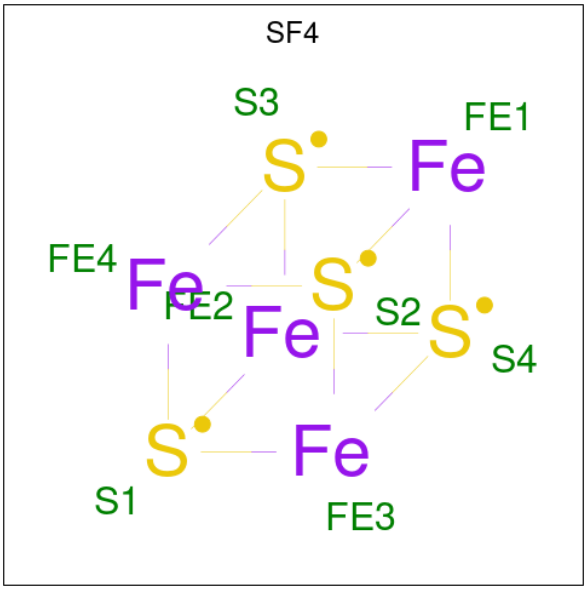
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
59	1Y	1	Total Zn 1 1	0	0
59	14	1	Total Zn 1 1	0	0
59	15	1	Total Zn 1 1	0	0
59	16	1	Total Zn 1 1	0	0
59	19	1	Total Zn 1 1	0	0
59	1n	1	Total Zn 1 1	0	0
59	2Y	1	Total Zn 1 1	0	0
59	24	1	Total Zn 1 1	0	0
59	25	1	Total Zn 1 1	0	0
59	26	1	Total Zn 1 1	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
59	29	1	Total Zn 1 1	0	0
59	2n	1	Total Zn 1 1	0	0

- Molecule 60 is IRON/SULFUR CLUSTER (three-letter code: SF4) (formula: Fe_4S_4).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
60	1d	1	Total Fe S 8 4 4	0	0
60	2d	1	Total Fe S 8 4 4	0	0

- Molecule 61 is water.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	1A	3943	Total O 3943 3943	0	0
61	1B	106	Total O 106 106	0	0
61	1D	106	Total O 106 106	0	0
61	1E	75	Total O 75 75	0	0
61	1F	62	Total O 62 62	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	1G	15	Total O 15 15	0	0
61	1H	13	Total O 13 13	0	0
61	1I	6	Total O 6 6	0	0
61	1N	50	Total O 50 50	0	0
61	1O	23	Total O 23 23	0	0
61	1P	56	Total O 56 56	0	0
61	1Q	38	Total O 38 38	0	0
61	1R	37	Total O 37 37	0	0
61	1S	11	Total O 11 11	0	0
61	1T	39	Total O 39 39	0	0
61	1U	43	Total O 43 43	0	0
61	1V	36	Total O 36 36	0	0
61	1W	29	Total O 29 29	0	0
61	1X	26	Total O 26 26	0	0
61	1Y	16	Total O 16 16	0	0
61	1Z	12	Total O 12 12	0	0
61	10	21	Total O 21 21	0	0
61	11	24	Total O 24 24	0	0
61	12	12	Total O 12 12	0	0
61	13	19	Total O 19 19	0	0
61	14	3	Total O 3 3	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	15	24	Total O 24 24	0	0
61	16	19	Total O 19 19	0	0
61	17	14	Total O 14 14	0	0
61	18	25	Total O 25 25	0	0
61	19	2	Total O 2 2	0	0
61	1a	465	Total O 465 465	0	0
61	1b	1	Total O 1 1	0	0
61	1d	8	Total O 8 8	0	0
61	1e	4	Total O 4 4	0	0
61	1f	1	Total O 1 1	0	0
61	1h	1	Total O 1 1	0	0
61	1i	1	Total O 1 1	0	0
61	1j	1	Total O 1 1	0	0
61	1l	4	Total O 4 4	0	0
61	1o	4	Total O 4 4	0	0
61	1t	1	Total O 1 1	0	0
61	1u	1	Total O 1 1	0	0
61	1y	3	Total O 3 3	0	0
61	2A	1664	Total O 1664 1664	0	0
61	2B	25	Total O 25 25	0	0
61	2D	38	Total O 38 38	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	2E	18	Total O 18 18	0	0
61	2F	18	Total O 18 18	0	0
61	2G	4	Total O 4 4	0	0
61	2H	1	Total O 1 1	0	0
61	2I	1	Total O 1 1	0	0
61	2N	2	Total O 2 2	0	0
61	2O	11	Total O 11 11	0	0
61	2P	11	Total O 11 11	0	0
61	2Q	10	Total O 10 10	0	0
61	2R	16	Total O 16 16	0	0
61	2T	7	Total O 7 7	0	0
61	2U	8	Total O 8 8	0	0
61	2V	5	Total O 5 5	0	0
61	2W	17	Total O 17 17	0	0
61	2X	3	Total O 3 3	0	0
61	2Y	3	Total O 3 3	0	0
61	2Z	3	Total O 3 3	0	0
61	20	6	Total O 6 6	0	0
61	21	12	Total O 12 12	0	0
61	23	1	Total O 1 1	0	0
61	25	6	Total O 6 6	0	0

Continued on next page...

Continued from previous page...

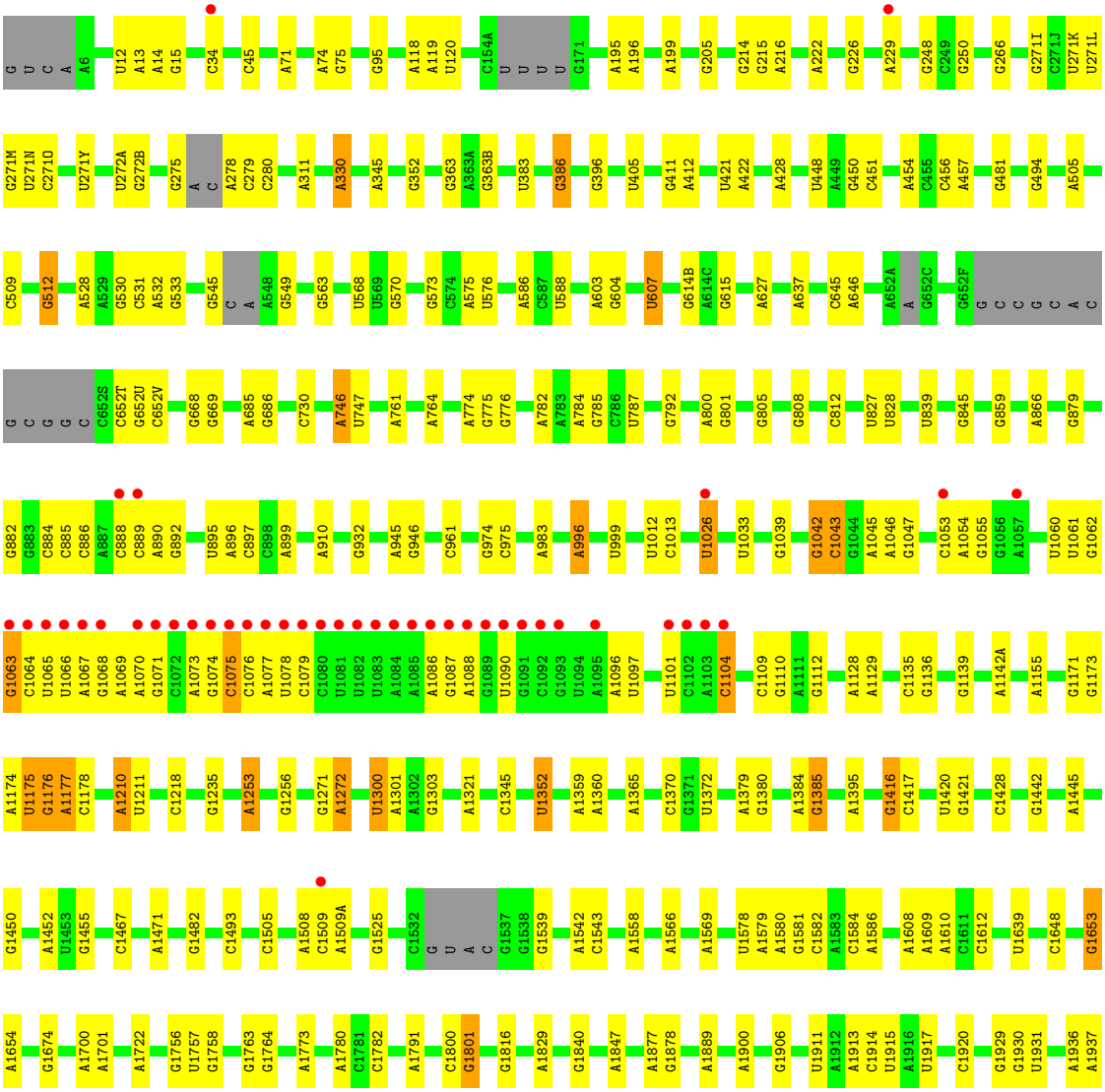
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	26	5	Total O 5 5	0	0
61	27	5	Total O 5 5	0	0
61	28	8	Total O 8 8	0	0
61	2a	245	Total O 245 245	0	0
61	2d	2	Total O 2 2	0	0
61	2e	1	Total O 1 1	0	0
61	2f	3	Total O 3 3	0	0
61	2l	3	Total O 3 3	0	0
61	2m	1	Total O 1 1	0	0
61	2o	2	Total O 2 2	0	0
61	2q	2	Total O 2 2	0	0
61	2r	1	Total O 1 1	0	0
61	2t	2	Total O 2 2	0	0
61	2y	2	Total O 2 2	0	0

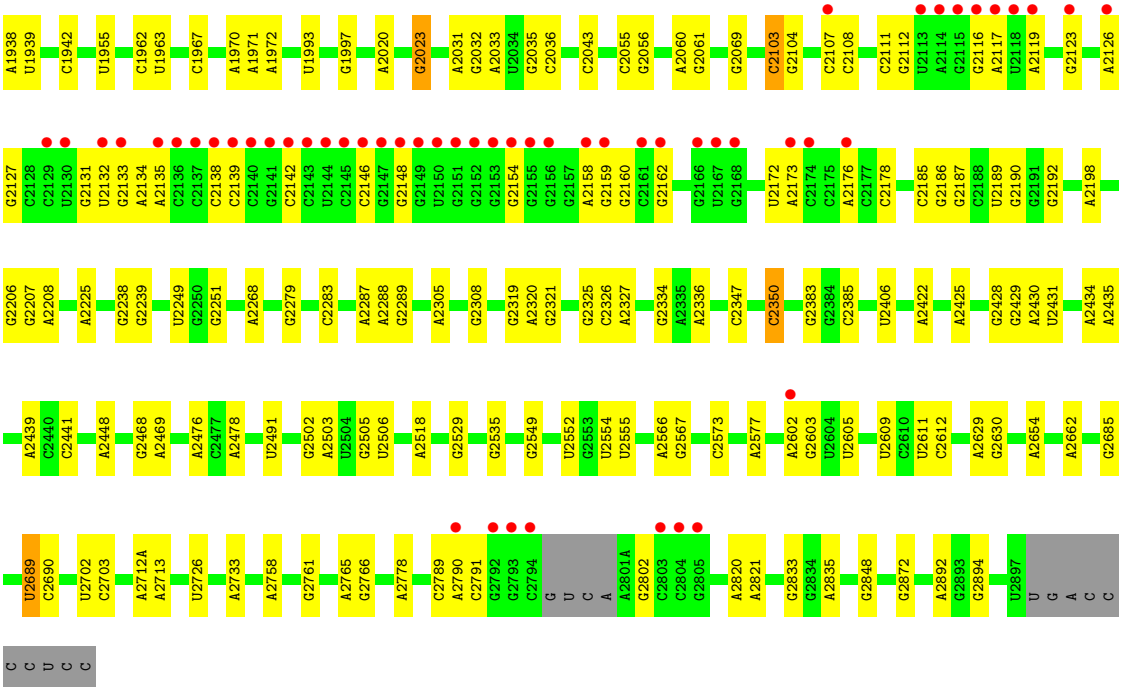
3 Residue-property plots (i)

These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red dot above a residue indicates a poor fit to the electron density (RSRZ > 2). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

- Molecule 1: 23S Ribosomal RNA

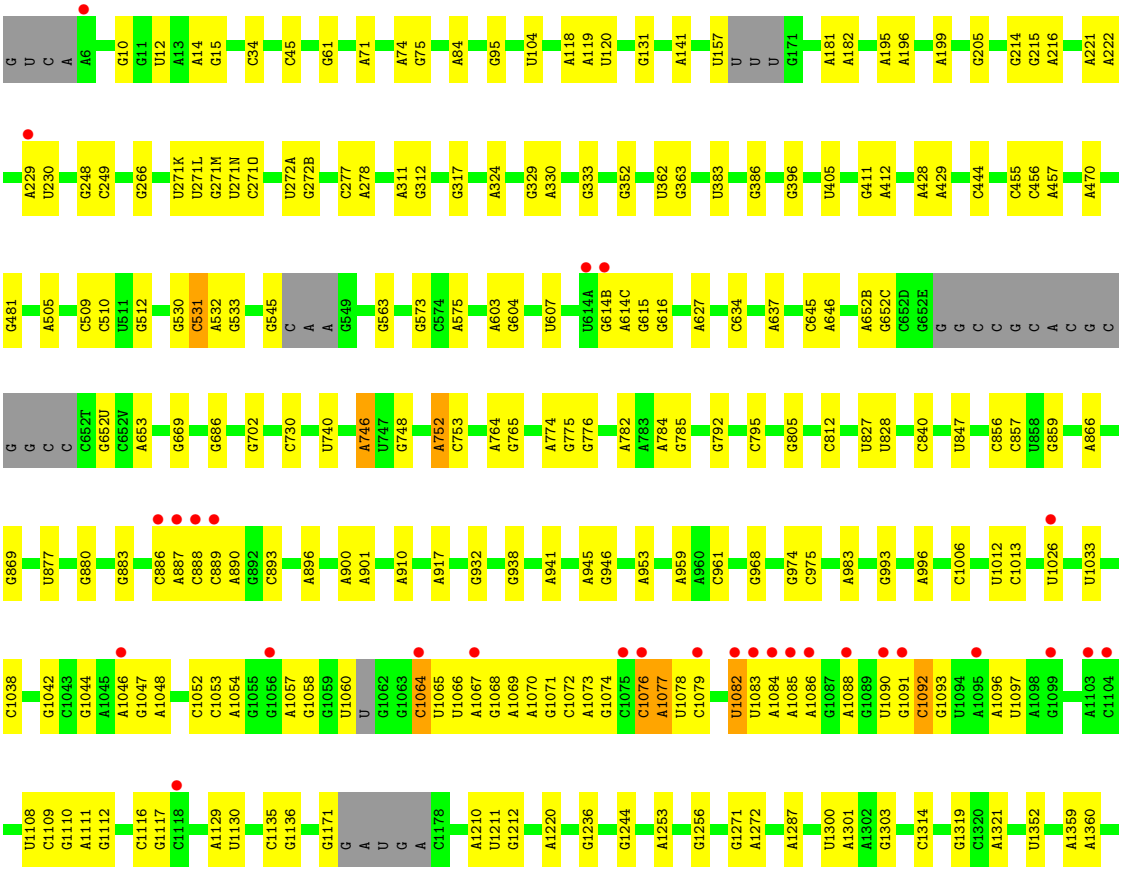
Chain 1A:

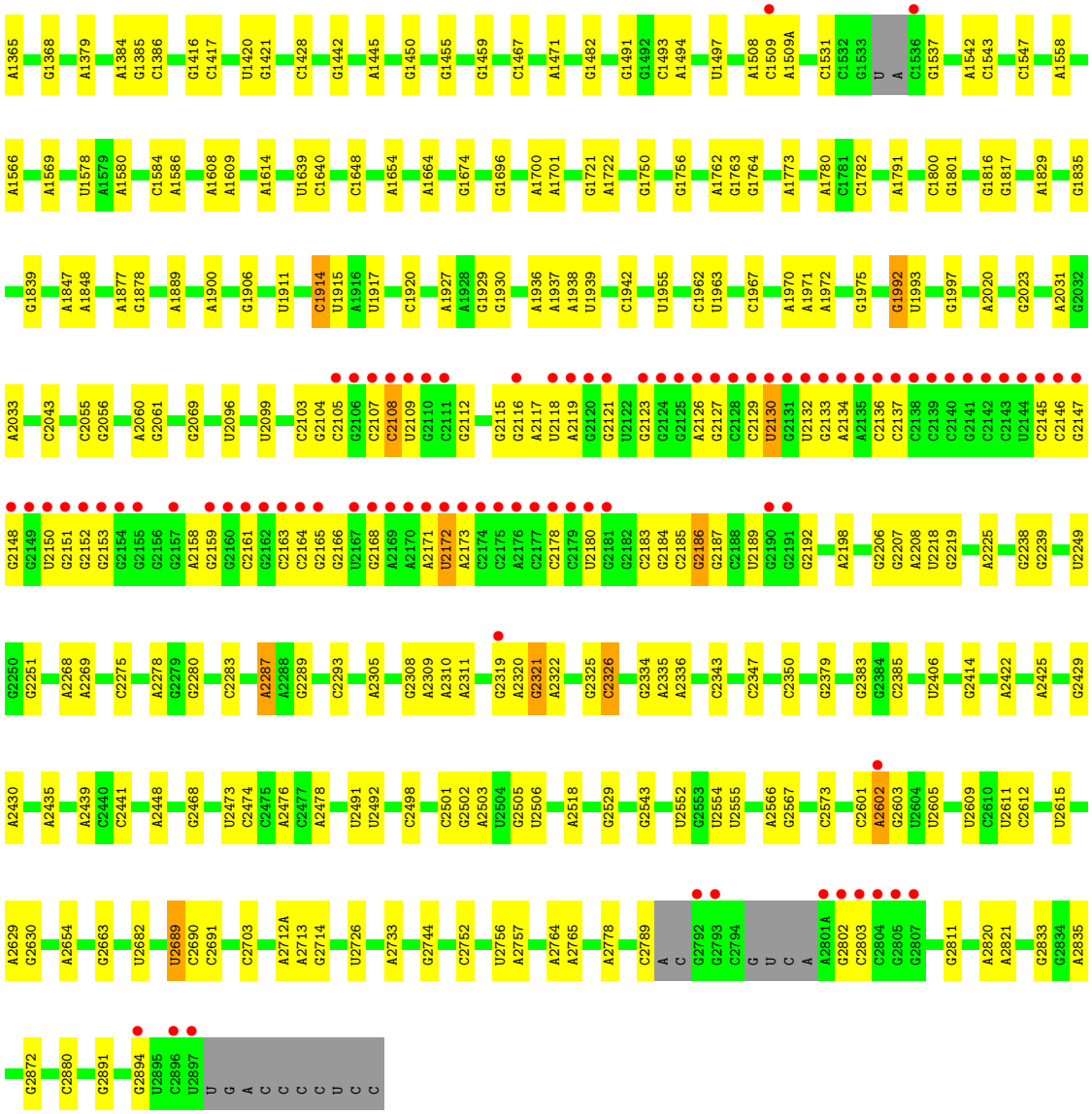




• Molecule 1: 23S Ribosomal RNA

Chain 2A:





• Molecule 2: 5S Ribosomal RNA

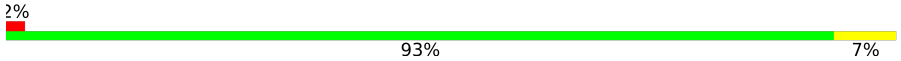
Chain 1B:

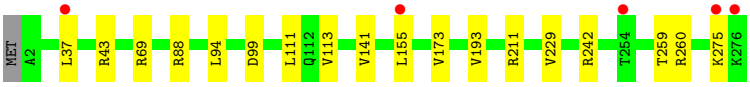
• Molecule 2: 5S Ribosomal RNA

Chain 2B:

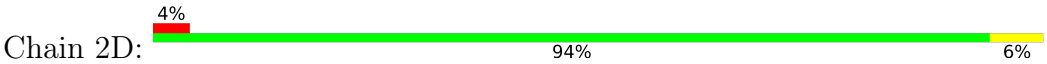
• Molecule 3: 50S ribosomal protein L2

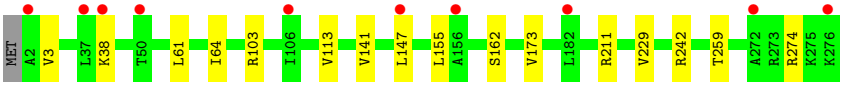
Chain 1D:



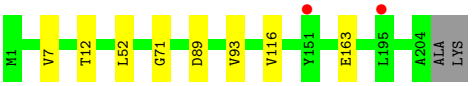


• Molecule 3: 50S ribosomal protein L2

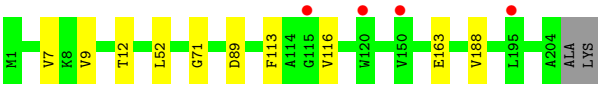




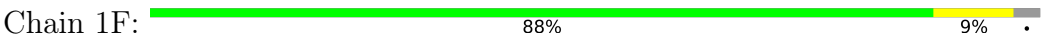
• Molecule 4: 50S ribosomal protein L3

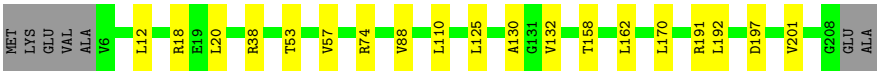


• Molecule 4: 50S ribosomal protein L3

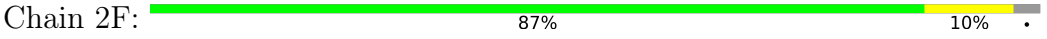


• Molecule 5: 50S ribosomal protein L4

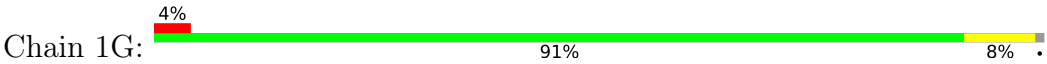




• Molecule 5: 50S ribosomal protein L4

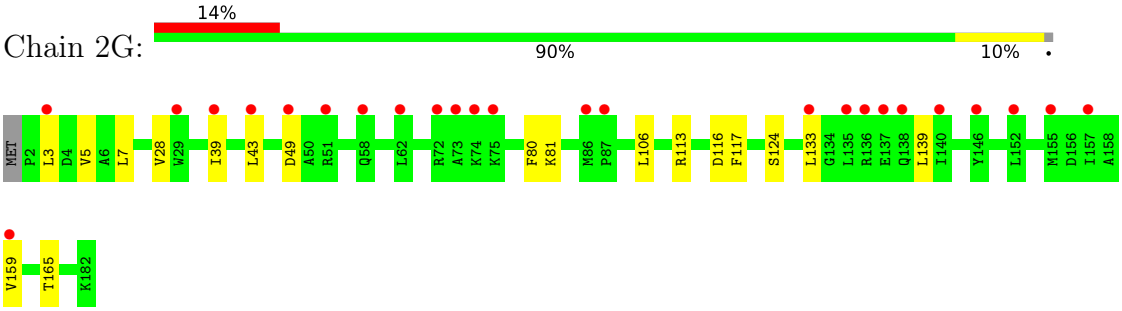


• Molecule 6: 50S ribosomal protein L5



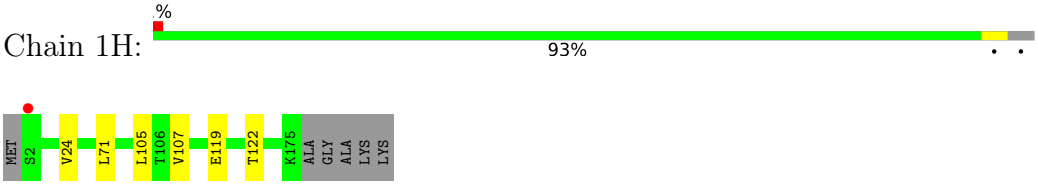
• Molecule 6: 50S ribosomal protein L5

Chain 2G:



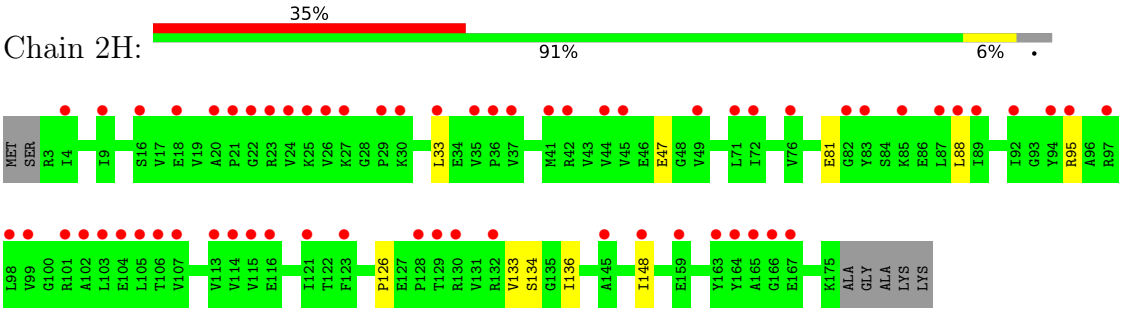
• Molecule 7: 50S ribosomal protein L6

Chain 1H:



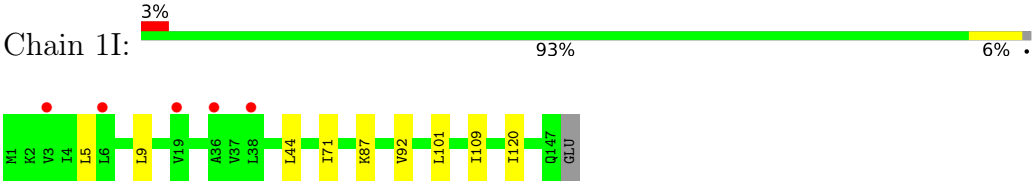
• Molecule 7: 50S ribosomal protein L6

Chain 2H:



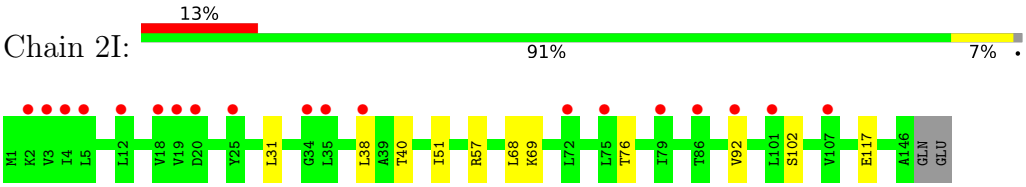
• Molecule 8: 50S ribosomal protein L9

Chain 1I:



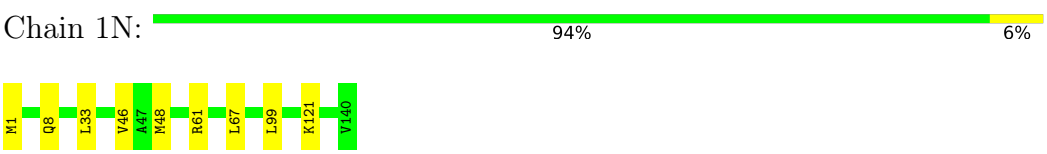
• Molecule 8: 50S ribosomal protein L9

Chain 2I:



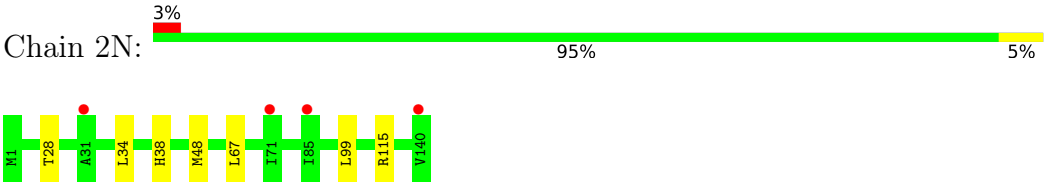
• Molecule 9: 50S ribosomal protein L13

Chain 1N:



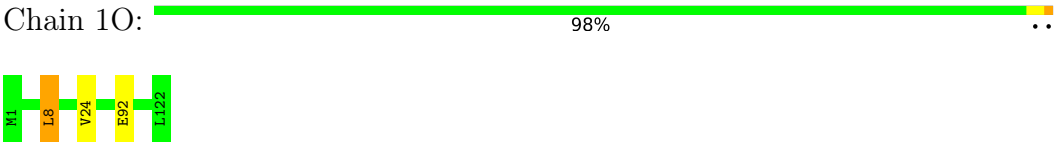
• Molecule 9: 50S ribosomal protein L13

Chain 2N:



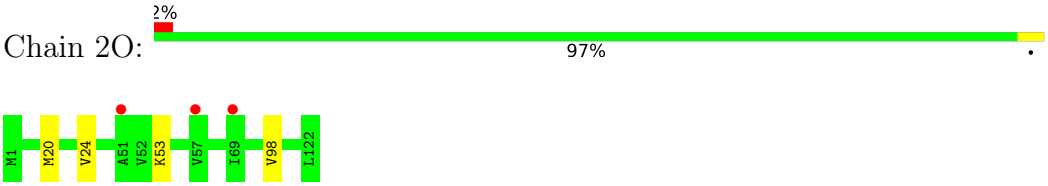
• Molecule 10: 50S ribosomal protein L14

Chain 1O:



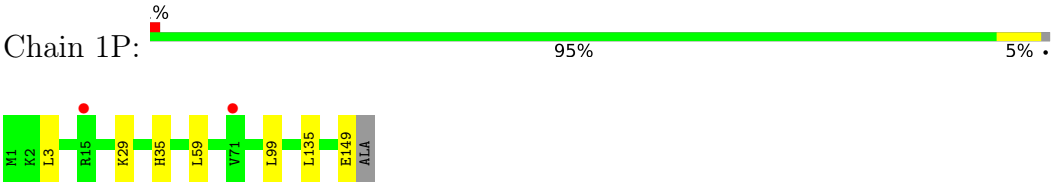
• Molecule 10: 50S ribosomal protein L14

Chain 2O:



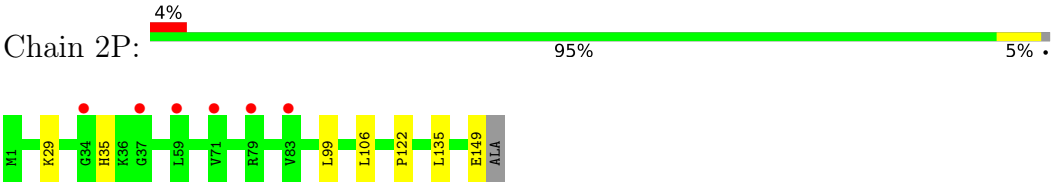
• Molecule 11: 50S ribosomal protein L15

Chain 1P:



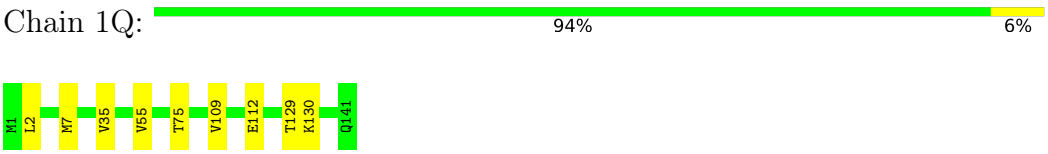
• Molecule 11: 50S ribosomal protein L15

Chain 2P:



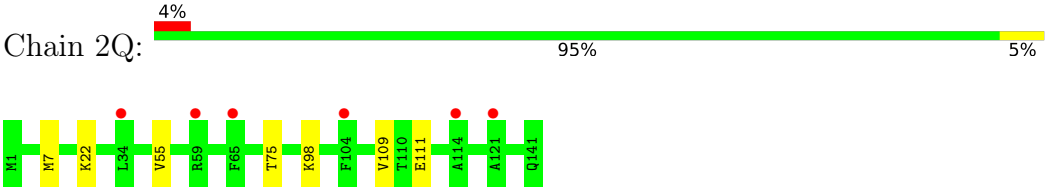
• Molecule 12: 50S ribosomal protein L16

Chain 1Q:



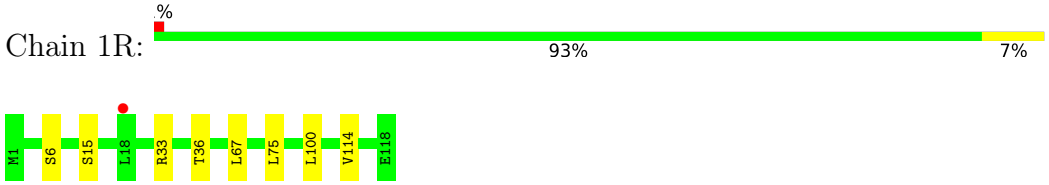
• Molecule 12: 50S ribosomal protein L16

Chain 2Q:



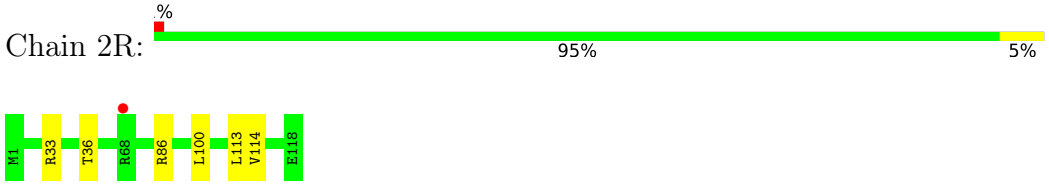
• Molecule 13: 50S ribosomal protein L17

Chain 1R:



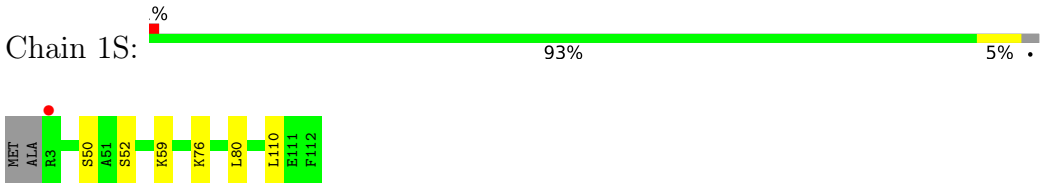
• Molecule 13: 50S ribosomal protein L17

Chain 2R:



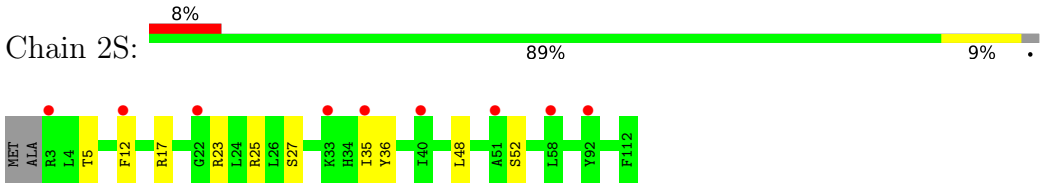
• Molecule 14: 50S ribosomal protein L18

Chain 1S:



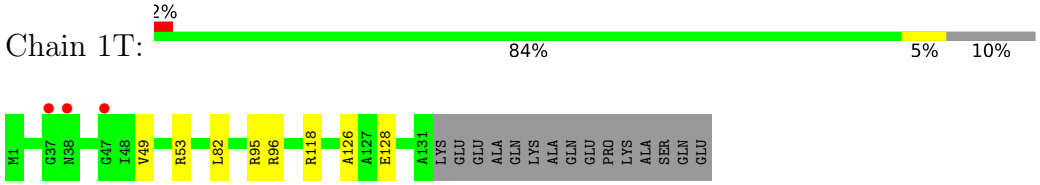
• Molecule 14: 50S ribosomal protein L18

Chain 2S:



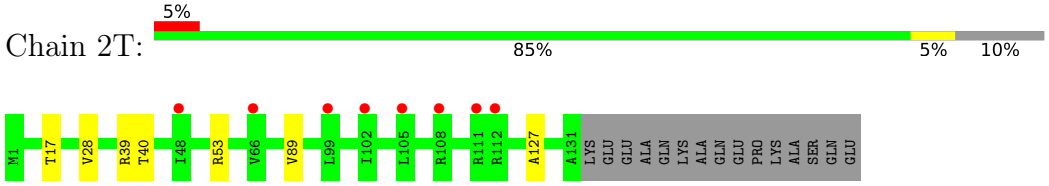
• Molecule 15: 50S ribosomal protein L19

Chain 1T:



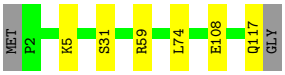
• Molecule 15: 50S ribosomal protein L19

Chain 2T:



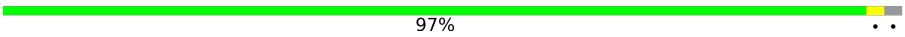
• Molecule 16: 50S ribosomal protein L20

Chain 1U:



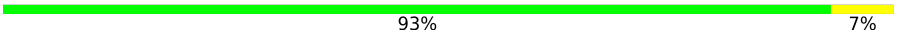
• Molecule 16: 50S ribosomal protein L20

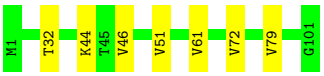
Chain 2U:



• Molecule 17: 50S ribosomal protein L21

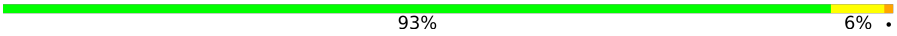
Chain 1V:





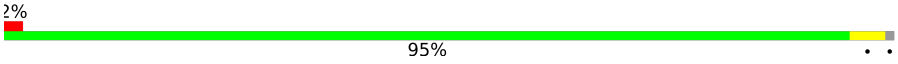
• Molecule 17: 50S ribosomal protein L21

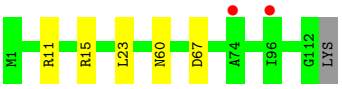
Chain 2V:



• Molecule 18: 50S ribosomal protein L22

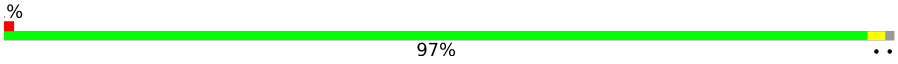
Chain 1W:

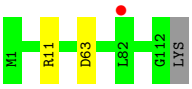




• Molecule 18: 50S ribosomal protein L22

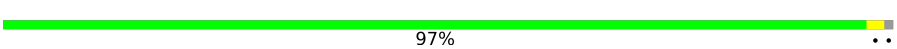
Chain 2W:

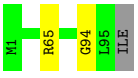




• Molecule 19: 50S ribosomal protein L23

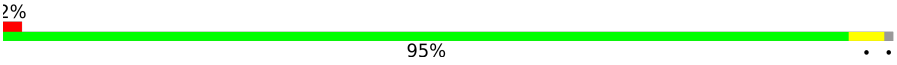
Chain 1X:

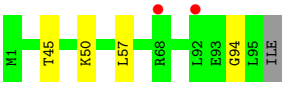




• Molecule 19: 50S ribosomal protein L23

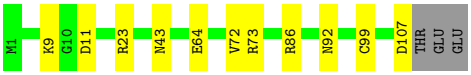
Chain 2X:





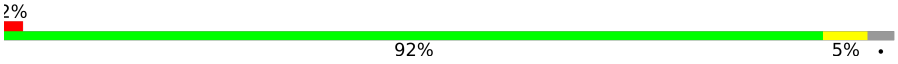
• Molecule 20: 50S ribosomal protein L24

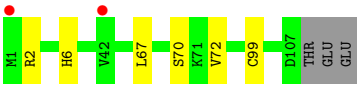
Chain 1Y:



• Molecule 20: 50S ribosomal protein L24

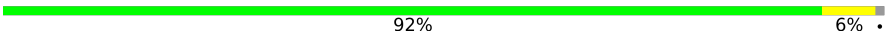
Chain 2Y:

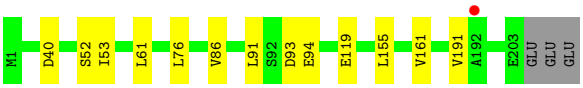




• Molecule 21: 50S ribosomal protein L25

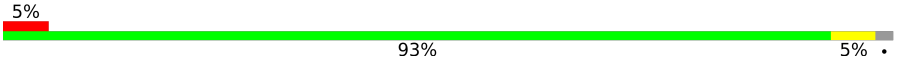
Chain 1Z:

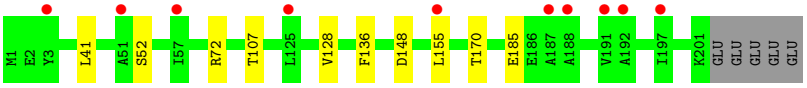




• Molecule 21: 50S ribosomal protein L25

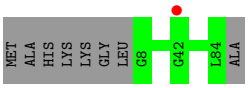
Chain 2Z:





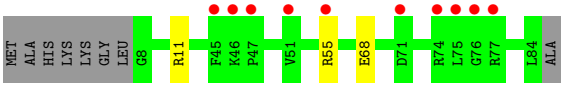
• Molecule 22: 50S ribosomal protein L27

Chain 10:



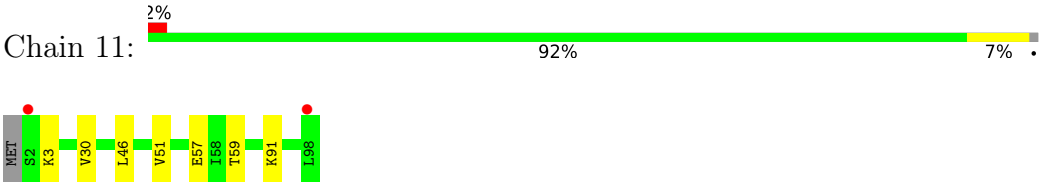
• Molecule 22: 50S ribosomal protein L27

Chain 20:



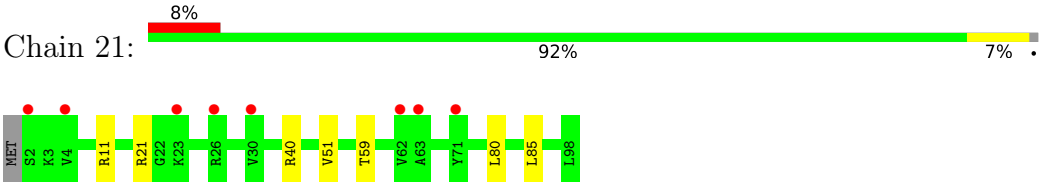
• Molecule 23: 50S ribosomal protein L28

Chain 11:



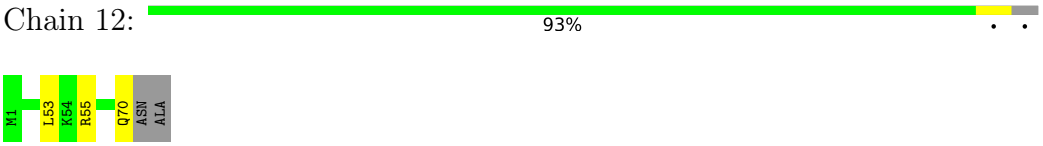
• Molecule 23: 50S ribosomal protein L28

Chain 21:



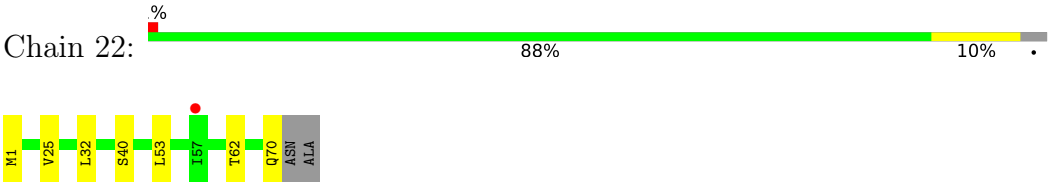
• Molecule 24: 50S ribosomal protein L29

Chain 12:



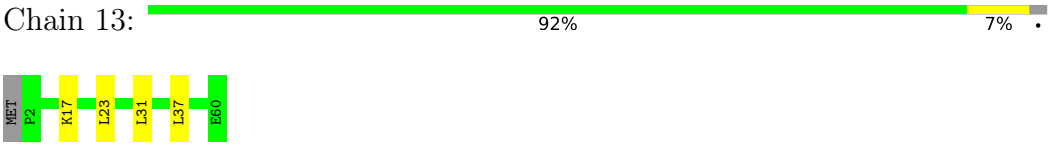
• Molecule 24: 50S ribosomal protein L29

Chain 22:



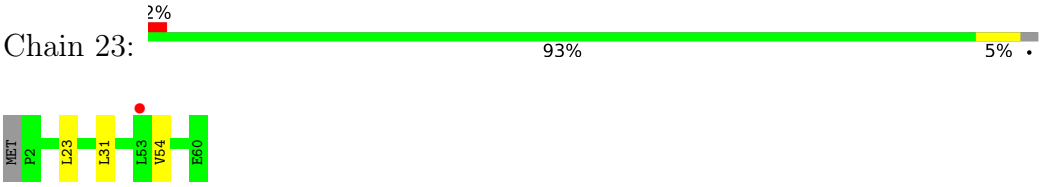
• Molecule 25: 50S ribosomal protein L30

Chain 13:



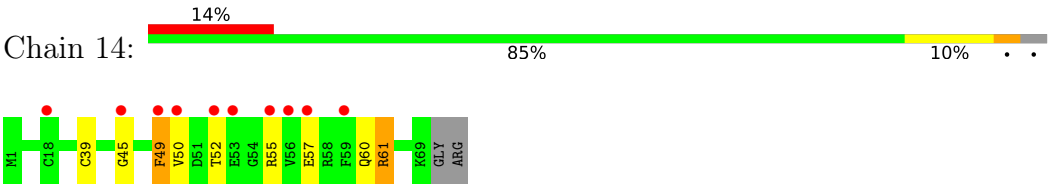
• Molecule 25: 50S ribosomal protein L30

Chain 23:



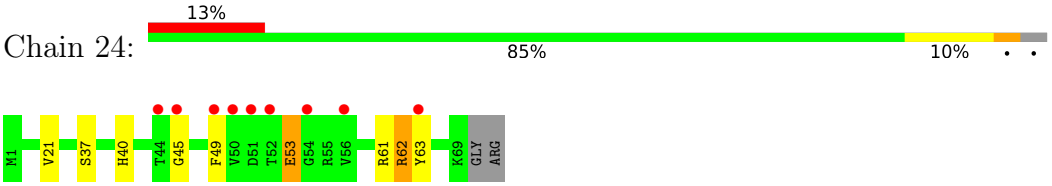
• Molecule 26: 50S ribosomal protein L31

Chain 14:



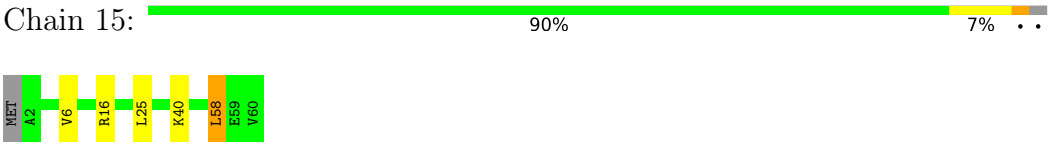
• Molecule 26: 50S ribosomal protein L31

Chain 24:



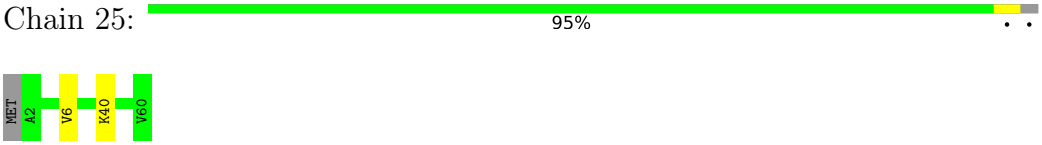
• Molecule 27: 50S ribosomal protein L32

Chain 15:



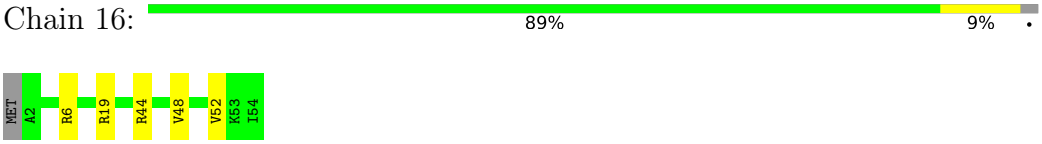
• Molecule 27: 50S ribosomal protein L32

Chain 25:



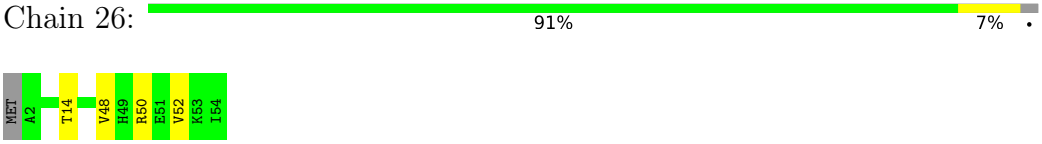
• Molecule 28: 50S ribosomal protein L33

Chain 16:



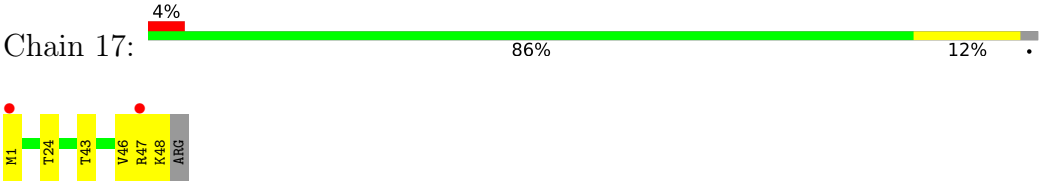
• Molecule 28: 50S ribosomal protein L33

Chain 26:



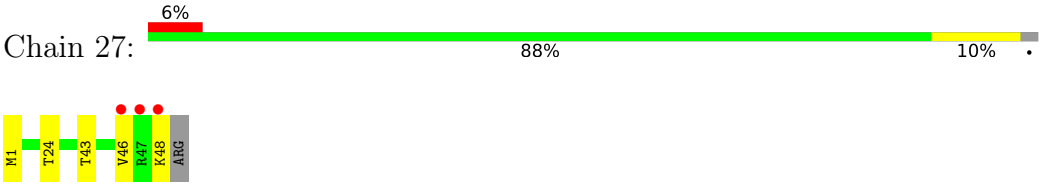
• Molecule 29: 50S ribosomal protein L34

Chain 17:



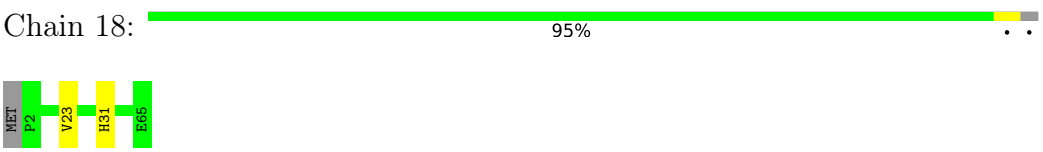
• Molecule 29: 50S ribosomal protein L34

Chain 27:



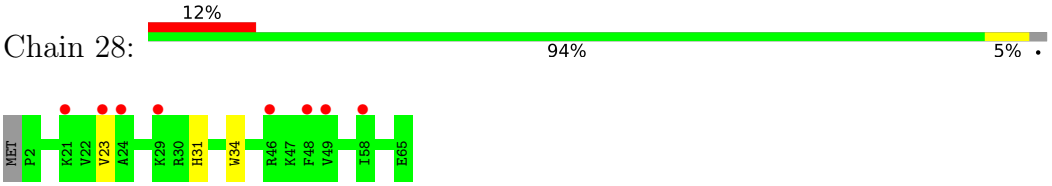
• Molecule 30: 50S ribosomal protein L35

Chain 18:



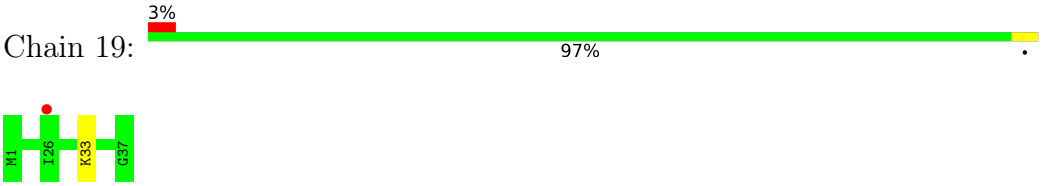
• Molecule 30: 50S ribosomal protein L35

Chain 28:



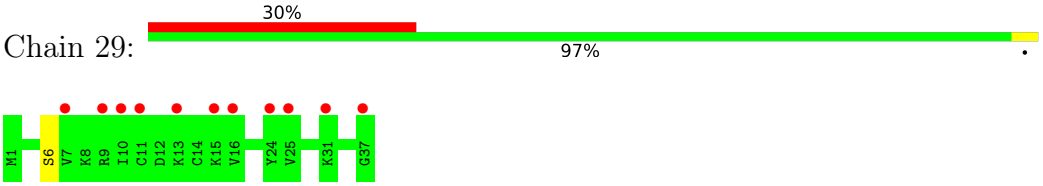
• Molecule 31: 50S ribosomal protein L36

Chain 19:



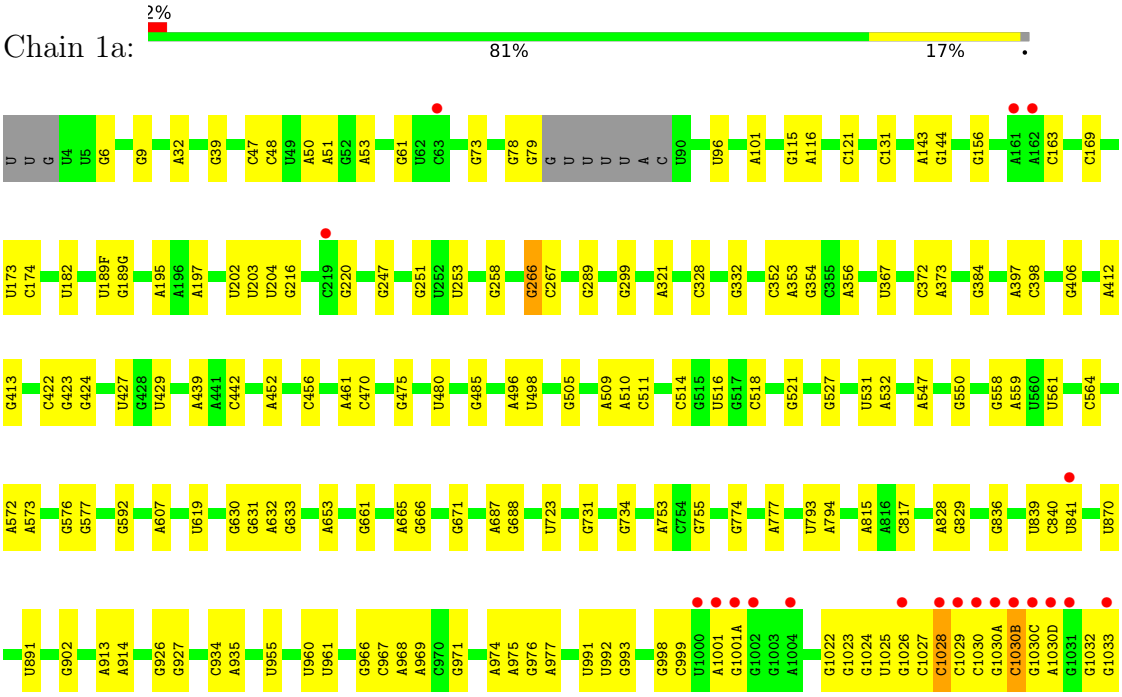
• Molecule 31: 50S ribosomal protein L36

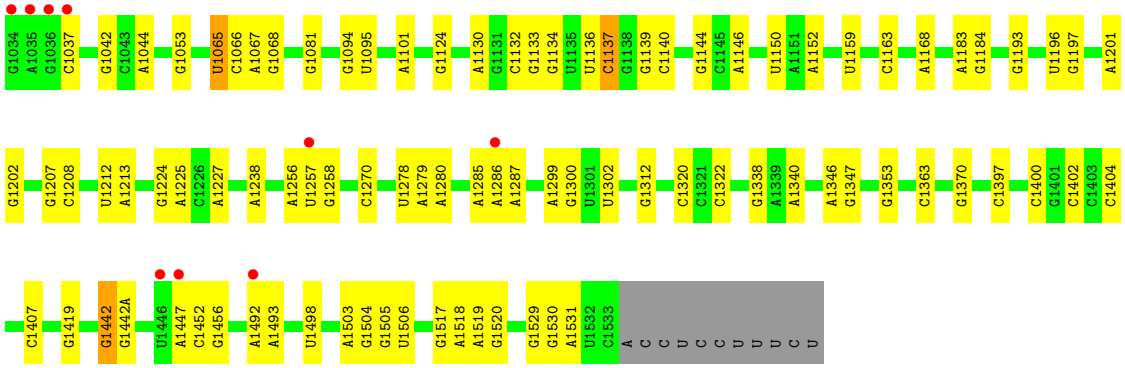
Chain 29:



• Molecule 32: 16S Ribosomal RNA

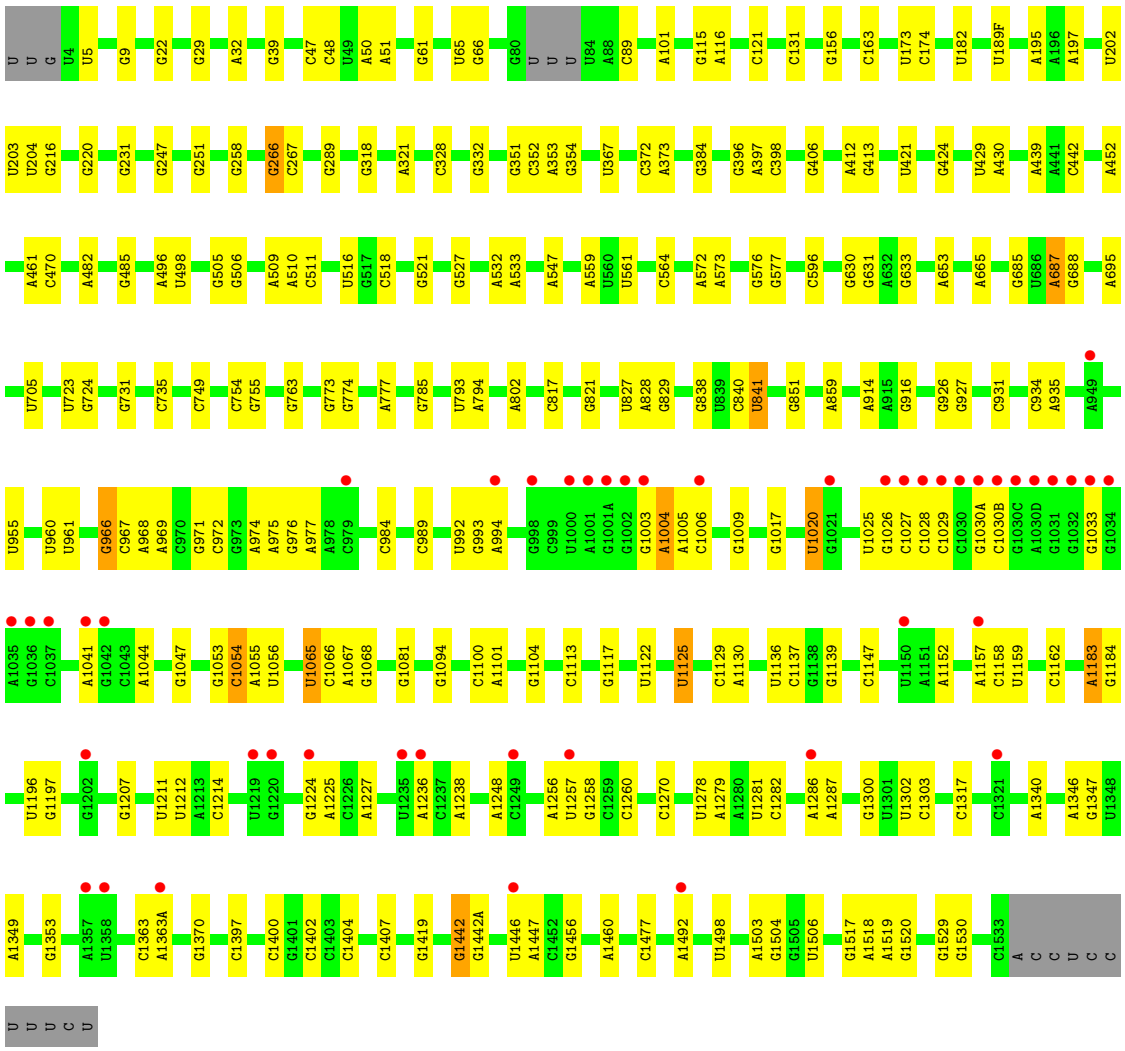
Chain 1a:





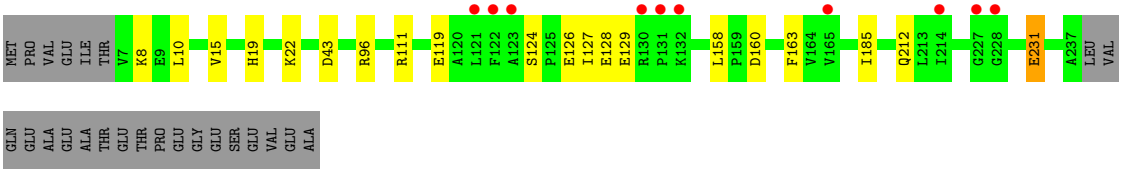
• Molecule 32: 16S Ribosomal RNA

Chain 2a:

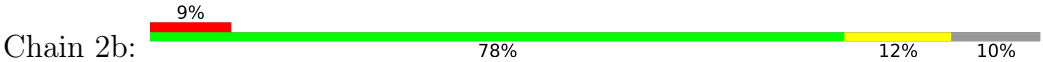


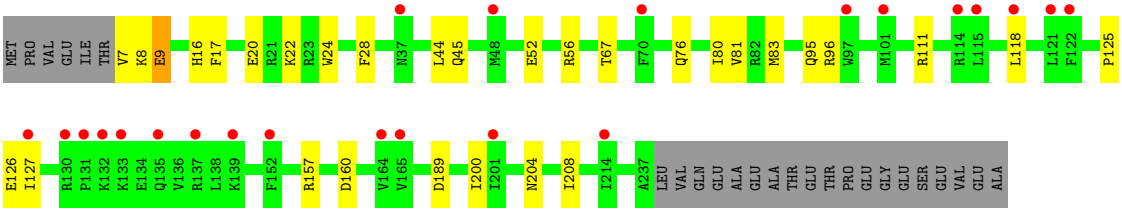
• Molecule 33: 30S ribosomal protein S2

Chain 1b:

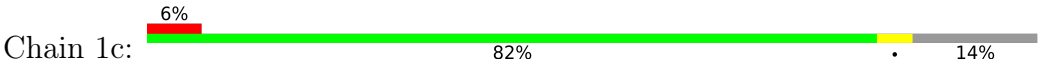


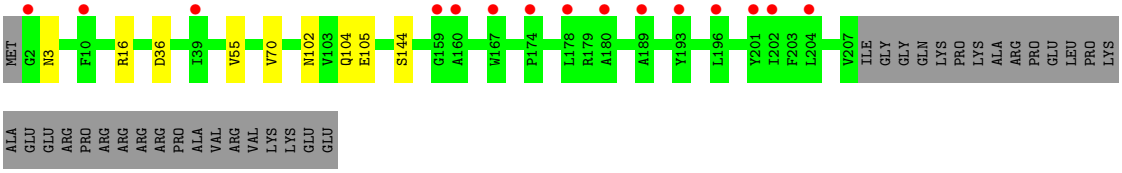
• Molecule 33: 30S ribosomal protein S2



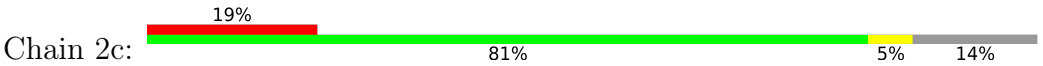


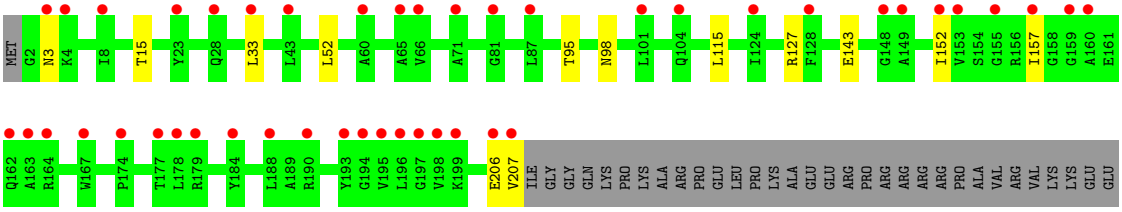
• Molecule 34: 30S ribosomal protein S3



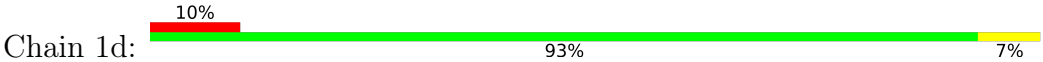


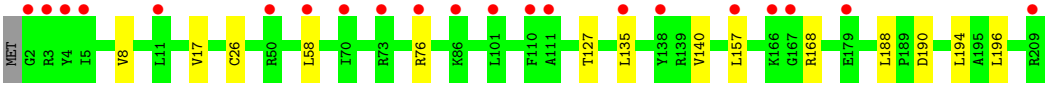
• Molecule 34: 30S ribosomal protein S3



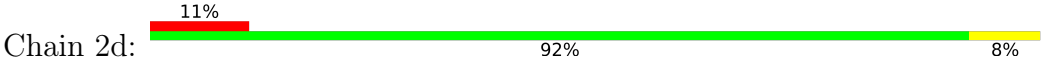


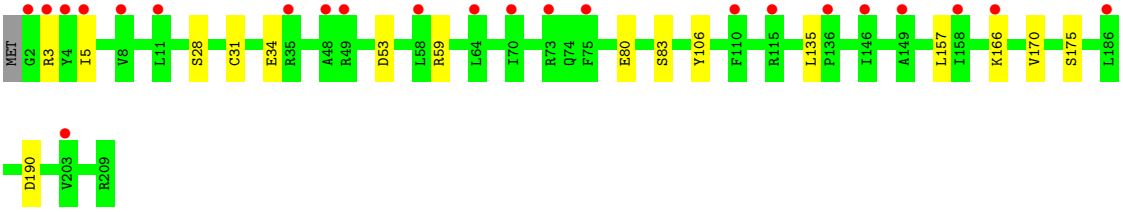
• Molecule 35: 30S ribosomal protein S4



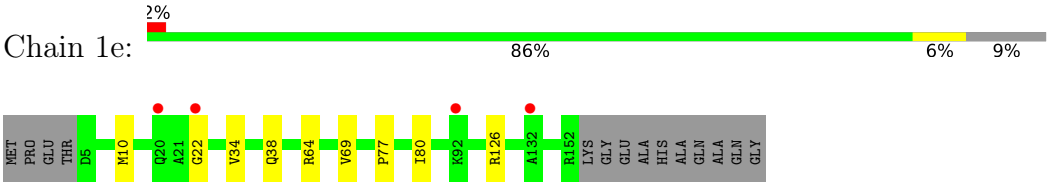


• Molecule 35: 30S ribosomal protein S4

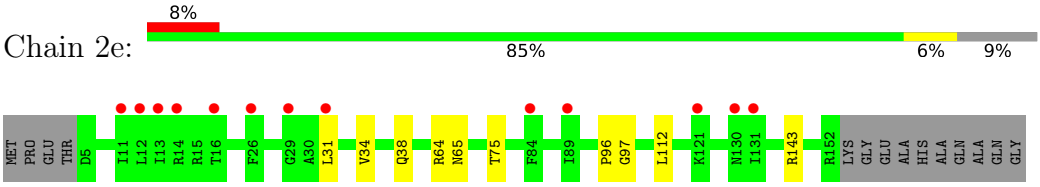




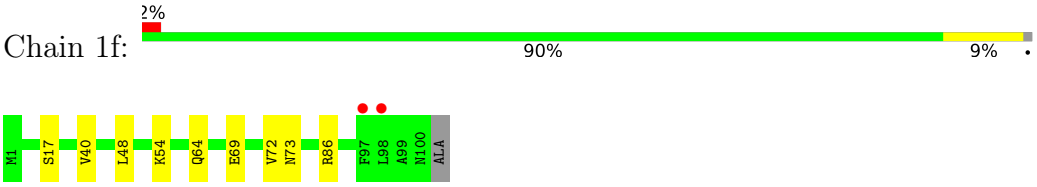
• Molecule 36: 30S ribosomal protein S5



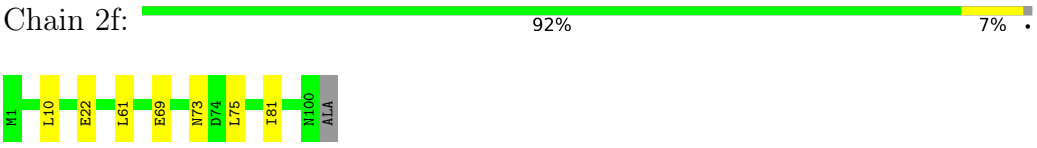
• Molecule 36: 30S ribosomal protein S5



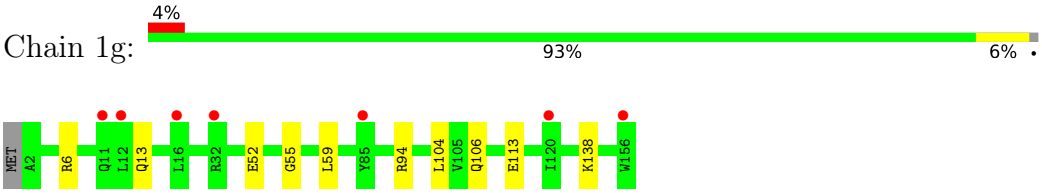
• Molecule 37: 30S ribosomal protein S6



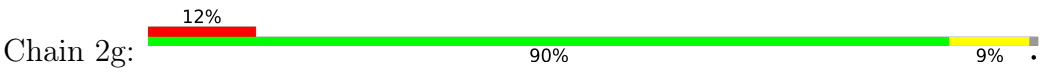
• Molecule 37: 30S ribosomal protein S6

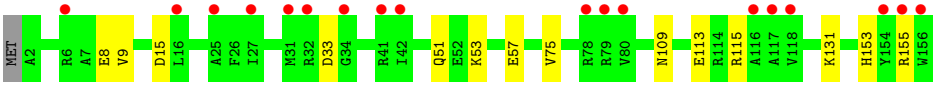


• Molecule 38: 30S ribosomal protein S7

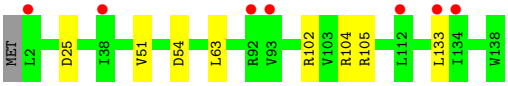


• Molecule 38: 30S ribosomal protein S7

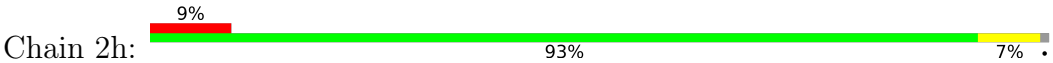


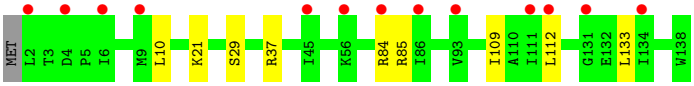


• Molecule 39: 30S ribosomal protein S8

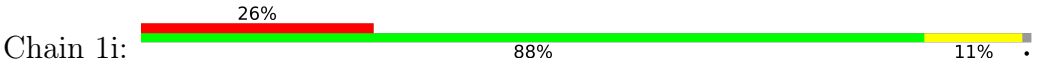


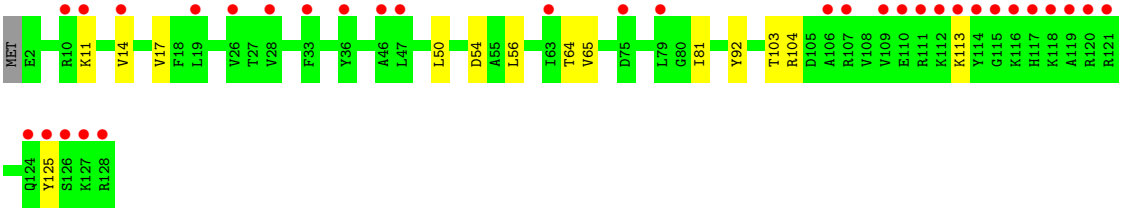
• Molecule 39: 30S ribosomal protein S8



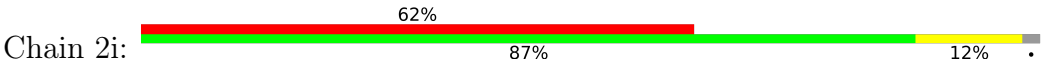


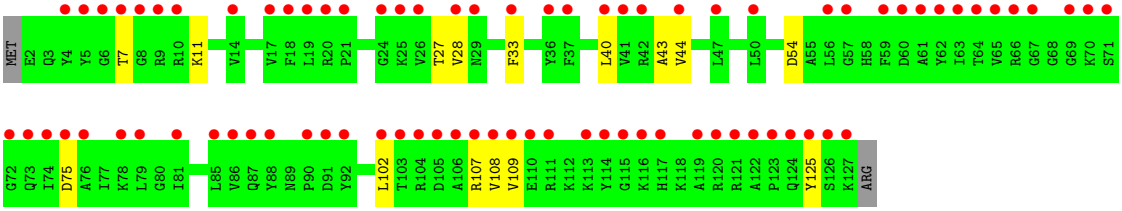
• Molecule 40: 30S ribosomal protein S9



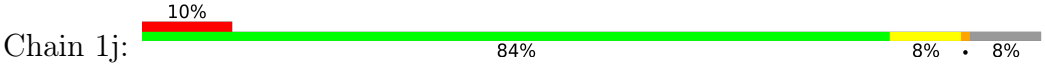


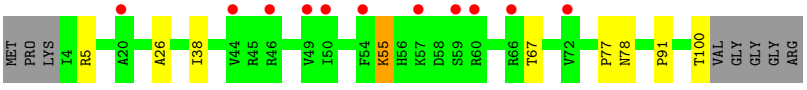
• Molecule 40: 30S ribosomal protein S9





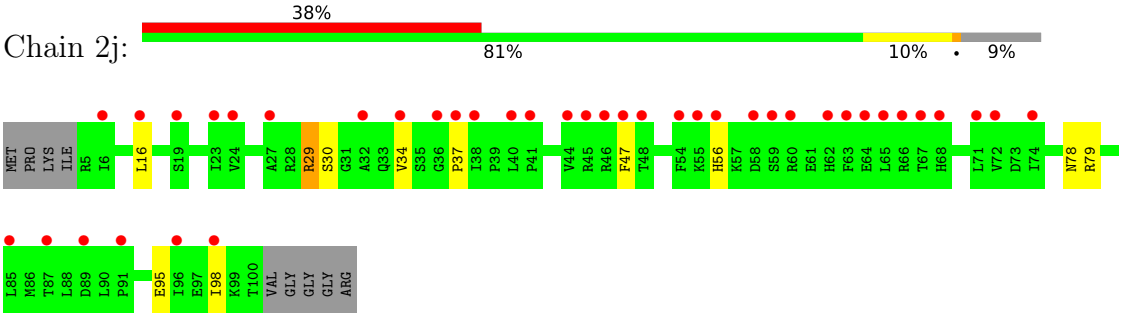
• Molecule 41: 30S ribosomal protein S10





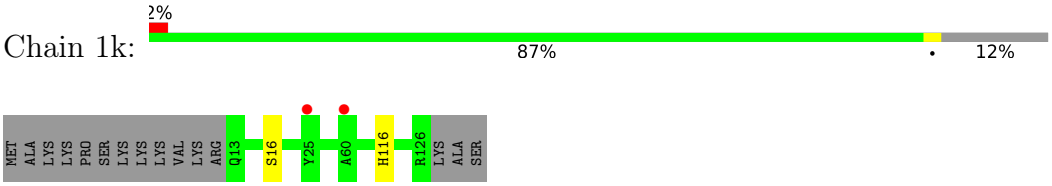
• Molecule 41: 30S ribosomal protein S10

Chain 2j:



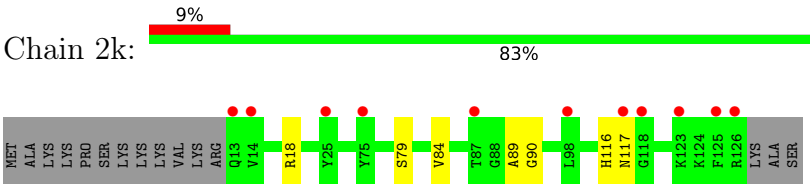
• Molecule 42: 30S ribosomal protein S11

Chain 1k:



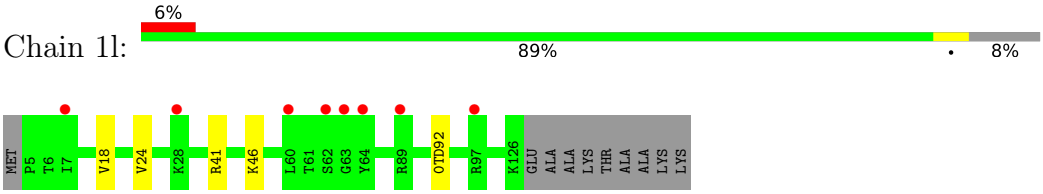
• Molecule 42: 30S ribosomal protein S11

Chain 2k:



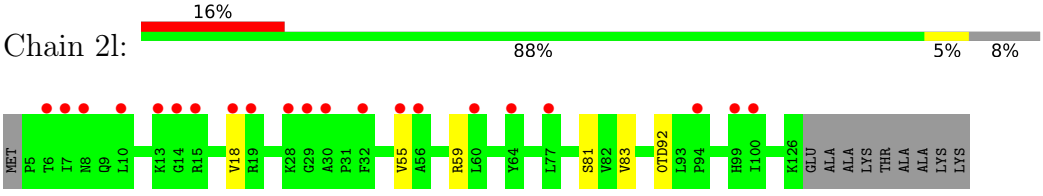
• Molecule 43: 30S ribosomal protein S12

Chain 1l:



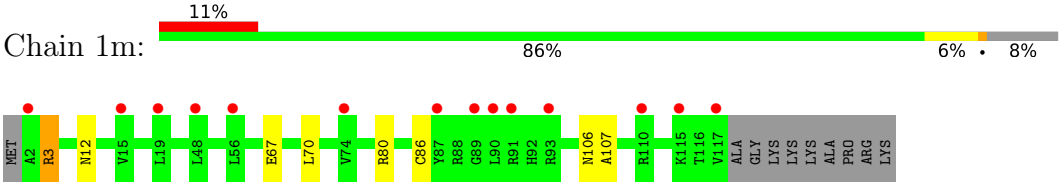
• Molecule 43: 30S ribosomal protein S12

Chain 2l:



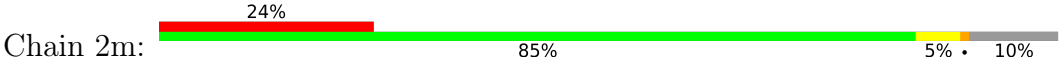
• Molecule 44: 30S ribosomal protein S13

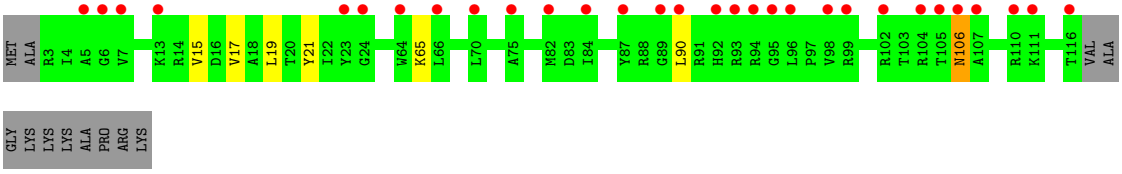
Chain 1m:



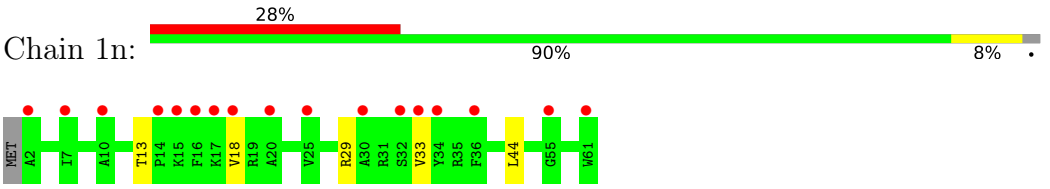
• Molecule 44: 30S ribosomal protein S13

Chain 2m:

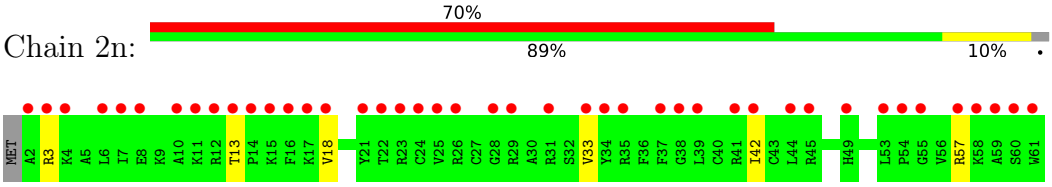




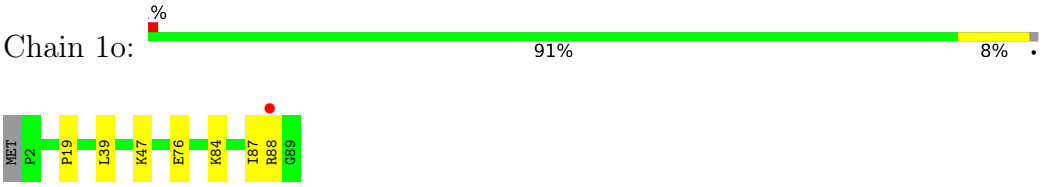
• Molecule 45: 30S ribosomal protein S14 type Z



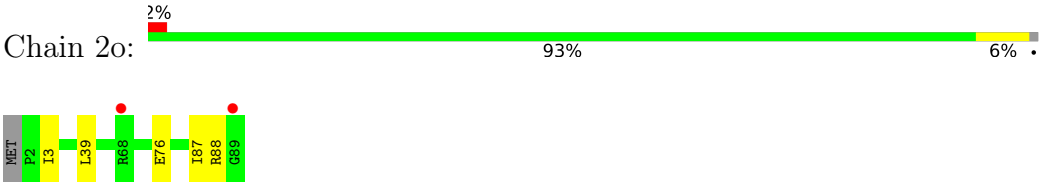
• Molecule 45: 30S ribosomal protein S14 type Z



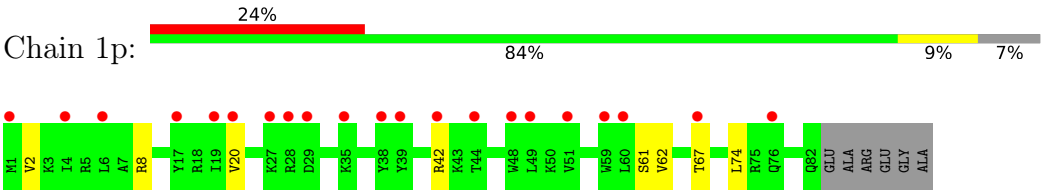
• Molecule 46: 30S ribosomal protein S15



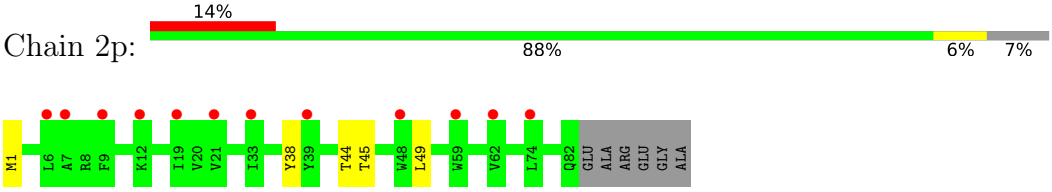
• Molecule 46: 30S ribosomal protein S15



• Molecule 47: 30S ribosomal protein S16

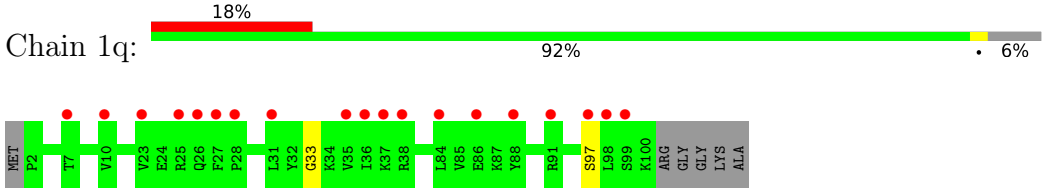


• Molecule 47: 30S ribosomal protein S16



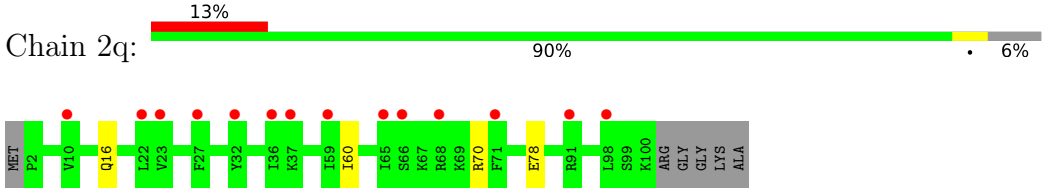
• Molecule 48: 30S ribosomal protein S17

Chain 1q:



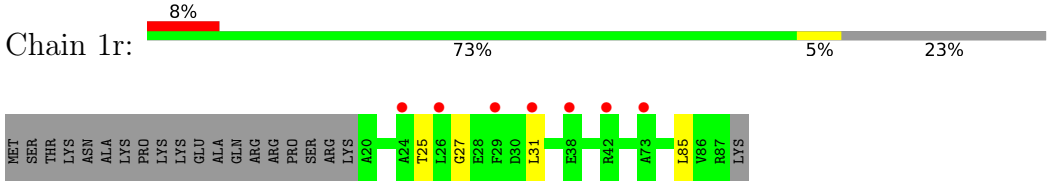
• Molecule 48: 30S ribosomal protein S17

Chain 2q:



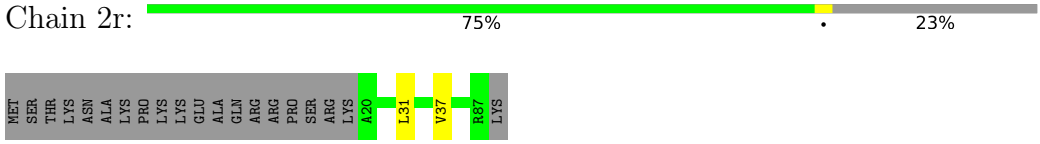
• Molecule 49: 30S ribosomal protein S18

Chain 1r:



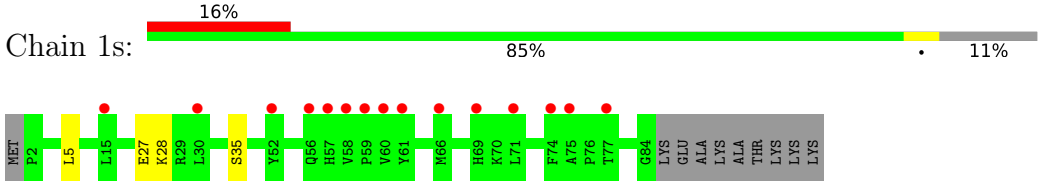
• Molecule 49: 30S ribosomal protein S18

Chain 2r:



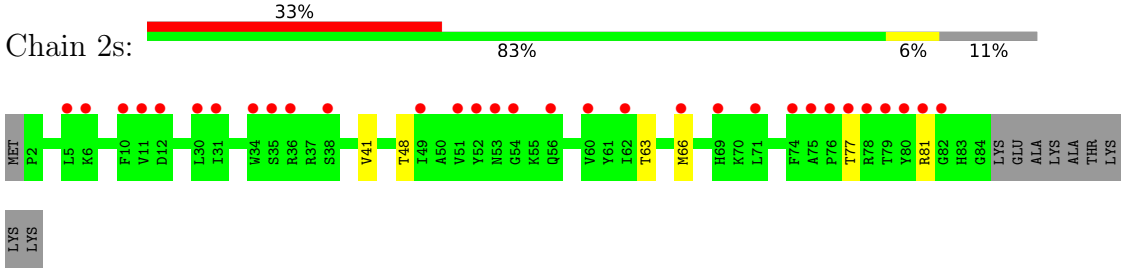
• Molecule 50: 30S ribosomal protein S19

Chain 1s:



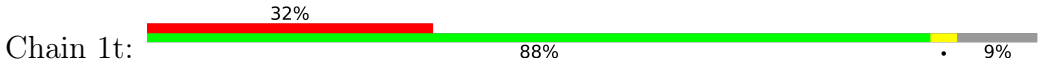
• Molecule 50: 30S ribosomal protein S19

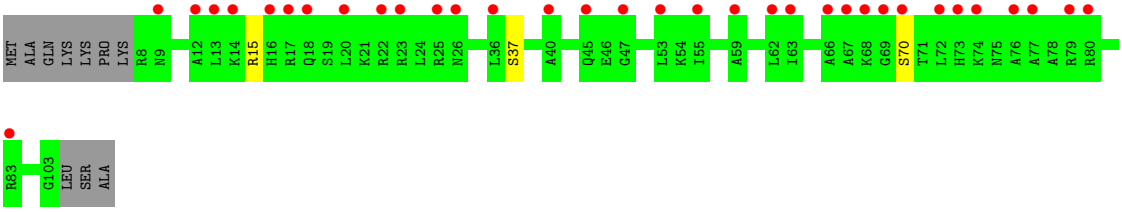
Chain 2s:



• Molecule 51: 30S ribosomal protein S20

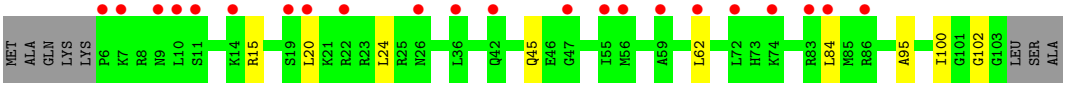
Chain 1t:





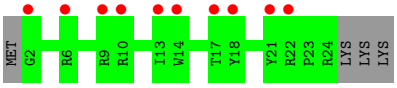
• Molecule 51: 30S ribosomal protein S20

Chain 2t:



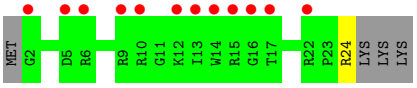
• Molecule 52: 30S ribosomal protein Thx

Chain 1u:



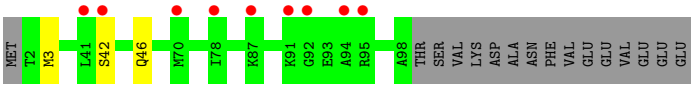
• Molecule 52: 30S ribosomal protein Thx

Chain 2u:



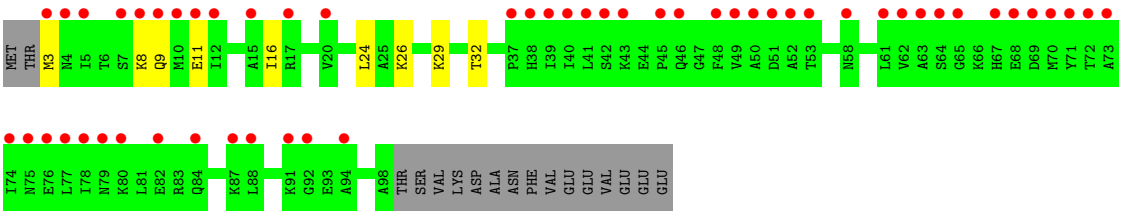
• Molecule 53: Ribosome-associated inhibitor A

Chain 1y:



• Molecule 53: Ribosome-associated inhibitor A

Chain 2y:



4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α, β, γ	209.90Å 450.73Å 622.70Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	174.04 – 2.50 198.90 – 2.50	Depositor EDS
% Data completeness (in resolution range)	99.8 (174.04-2.50) 99.8 (198.90-2.50)	Depositor EDS
R_{merge}	0.18	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	1.28 (at 2.52Å)	Xtriage
Refinement program	PHENIX 1.8.2	Depositor
R, R_{free}	0.207 , 0.250 0.207 , 0.250	Depositor DCC
R_{free} test set	100475 reflections (5.02%)	wwPDB-VP
Wilson B-factor (Å^2)	57.1	Xtriage
Anisotropy	0.108	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.28 , 52.7	EDS
L-test for twinning[2]	$< \|L\| > = 0.41$, $< L^2 > = 0.24$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.93	EDS
Total number of atoms	296715	wwPDB-VP
Average B, all atoms (Å^2)	62.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.67% of the height of the origin peak. No significant pseudotranslation is detected.*

[1] Intensities estimated from amplitudes.

[2] Theoretical values of $< |L| >$, $< L^2 >$ for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.

5 Model quality

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: HGR, 0TD, ZIT, 5MU, G7M, 2MG, 4OC, 2MA, OMC, MPD, M2G, 2MU, ZN, SF4, 5MC, MA6, OMG, PSU, MG, UR3

The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 5$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#$\|Z\|$ >5	RMSZ	#$\|Z\|$ >5
1	1A	0.51	1/69030 (0.0%)	1.00	85/107750 (0.1%)
1	2A	0.41	2/68902 (0.0%)	0.90	63/107548 (0.1%)
2	1B	0.42	0/2876	0.92	1/4486 (0.0%)
2	2B	0.35	0/2878	0.84	0/4490
3	1D	0.35	0/2181	0.58	0/2940
3	2D	0.33	0/2186	0.54	0/2944
4	1E	0.34	0/1592	0.54	0/2149
4	2E	0.31	0/1592	0.51	0/2149
5	1F	0.34	0/1619	0.55	0/2193
5	2F	0.30	0/1615	0.51	0/2188
6	1G	0.31	0/1451	0.48	0/1961
6	2G	0.30	0/1449	0.46	0/1957
7	1H	0.31	0/1356	0.51	0/1834
7	2H	0.29	0/1350	0.46	0/1826
8	1I	0.28	0/1109	0.49	0/1512
8	2I	0.28	0/1091	0.47	0/1490
9	1N	0.33	0/1148	0.52	0/1547
9	2N	0.30	0/1144	0.48	0/1543
10	1O	0.37	0/943	0.59	1/1269 (0.1%)
10	2O	0.32	0/943	0.57	0/1269
11	1P	0.35	0/1152	0.54	0/1533
11	2P	0.32	0/1152	0.54	0/1533
12	1Q	0.35	0/1143	0.52	0/1527
12	2Q	0.31	0/1143	0.49	0/1527
13	1R	0.33	0/982	0.58	0/1312
13	2R	0.29	0/982	0.52	0/1312
14	1S	0.31	0/887	0.51	0/1180
14	2S	0.31	0/880	0.48	0/1172
15	1T	0.34	0/1105	0.55	0/1477
15	2T	0.30	0/1097	0.48	0/1468
16	1U	0.34	0/977	0.54	0/1301

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
16	2U	0.30	0/977	0.45	0/1301
17	1V	0.35	0/786	0.54	0/1053
17	2V	0.31	0/782	0.53	0/1049
18	1W	0.37	0/897	0.53	0/1205
18	2W	0.32	0/897	0.50	0/1205
19	1X	0.36	0/764	0.57	0/1025
19	2X	0.31	0/764	0.49	0/1025
20	1Y	0.35	0/823	0.56	0/1099
20	2Y	0.31	0/823	0.52	0/1100
21	1Z	0.31	0/1620	0.50	0/2200
21	2Z	0.29	0/1590	0.48	0/2162
22	10	0.36	0/616	0.52	0/821
22	20	0.30	0/616	0.50	0/821
23	11	0.33	0/761	0.53	0/1013
23	21	0.34	0/766	0.51	0/1018
24	12	0.31	0/590	0.47	0/781
24	22	0.31	0/594	0.45	0/785
25	13	0.35	0/474	0.54	0/635
25	23	0.28	0/469	0.53	0/630
26	14	0.31	0/559	0.56	0/754
26	24	0.37	0/549	0.56	0/741
27	15	0.37	0/473	0.68	2/639 (0.3%)
27	25	0.29	0/469	0.54	0/635
28	16	0.33	0/460	0.55	0/613
28	26	0.28	0/456	0.47	0/608
29	17	0.34	0/426	0.54	0/561
29	27	0.30	0/426	0.53	0/561
30	18	0.33	0/525	0.54	0/691
30	28	0.29	0/525	0.47	0/691
31	19	0.35	0/310	0.55	0/407
31	29	0.32	0/310	0.53	0/407
32	1a	0.37	0/35795	0.87	23/55864 (0.0%)
32	2a	0.36	0/35890	0.87	27/56012 (0.0%)
33	1b	0.30	0/1876	0.47	0/2533
33	2b	0.30	0/1860	0.49	0/2518
34	1c	0.29	0/1582	0.46	0/2137
34	2c	0.29	0/1566	0.48	0/2119
35	1d	0.30	0/1695	0.51	0/2274
35	2d	0.28	0/1698	0.45	0/2277
36	1e	0.29	0/1149	0.51	0/1548
36	2e	0.29	0/1149	0.50	0/1548
37	1f	0.30	0/827	0.47	0/1120
37	2f	0.29	0/829	0.50	0/1123

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
38	1g	0.28	0/1254	0.41	0/1683
38	2g	0.28	0/1248	0.43	0/1676
39	1h	0.29	0/1118	0.49	0/1506
39	2h	0.28	0/1108	0.47	0/1494
40	1i	0.30	0/1005	0.49	0/1351
40	2i	0.30	0/985	0.48	0/1329
41	1j	0.30	0/732	0.48	0/993
41	2j	0.28	0/723	0.50	0/984
42	1k	0.28	0/849	0.48	0/1150
42	2k	0.28	0/848	0.50	0/1149
43	1l	0.29	0/937	0.51	0/1260
43	2l	0.28	0/937	0.50	0/1260
44	1m	0.27	0/924	0.51	0/1242
44	2m	0.29	0/905	0.48	0/1217
45	1n	0.30	0/501	0.46	0/664
45	2n	0.30	0/501	0.48	0/664
46	1o	0.28	0/739	0.45	0/985
46	2o	0.28	0/739	0.45	0/985
47	1p	0.28	0/697	0.51	0/939
47	2p	0.29	0/693	0.51	0/935
48	1q	0.28	0/836	0.47	0/1117
48	2q	0.30	0/836	0.48	0/1117
49	1r	0.28	0/560	0.48	0/746
49	2r	0.30	0/560	0.44	0/746
50	1s	0.29	0/663	0.49	0/895
50	2s	0.28	0/660	0.47	0/893
51	1t	0.27	0/734	0.41	0/969
51	2t	0.27	0/736	0.44	0/976
52	1u	0.29	0/203	0.48	0/266
52	2u	0.26	0/203	0.49	0/266
53	1y	0.27	0/776	0.47	0/1048
53	2y	0.28	0/761	0.45	0/1030
All	All	0.40	3/309939 (0.0%)	0.83	202/463231 (0.0%)

Chiral center outliers are detected by calculating the chiral volume of a chiral center and verifying if the center is modelled as a planar moiety or with the opposite hand.A planarity outlier is detected by checking planarity of atoms in a peptide group, atoms in a mainchain group or atoms of a sidechain that are expected to be planar.

Mol	Chain	#Chirality outliers	#Planarity outliers
11	1P	0	1
11	2P	0	1

Continued on next page...

Continued from previous page...

Mol	Chain	#Chirality outliers	#Planarity outliers
15	1T	0	1
21	2Z	0	1
26	14	0	1
33	1b	0	1
All	All	0	6

All (3) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	1A	330	A	N9-C4	-6.72	1.33	1.37
1	2A	2104	G	N1-C2	-5.73	1.33	1.37
1	2A	2104	G	C6-N1	-5.20	1.35	1.39

All (202) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	2104	G	C5-C6-O6	14.27	137.16	128.60
1	1A	1042	G	OP1-P-O3'	-11.85	79.13	105.20
1	2A	2104	G	N3-C2-N2	10.77	127.44	119.90
1	2A	2104	G	N1-C2-N2	-10.70	106.57	116.20
1	1A	330	A	C2-N3-C4	-10.32	105.44	110.60
1	2A	1092	C	N1-C2-O2	10.24	125.04	118.90
1	1A	512	G	O4'-C1'-N9	9.83	116.06	108.20
1	2A	2104	G	N1-C6-O6	-9.02	114.49	119.90
1	2A	1092	C	N3-C2-O2	-8.73	115.79	121.90
1	2A	1092	C	C2-N1-C1'	8.61	128.27	118.80
1	1A	330	A	N1-C2-N3	8.50	133.55	129.30
1	1A	999	U	O5'-P-OP2	-8.16	98.36	105.70
1	2A	2185	C	N1-C2-O2	8.14	123.78	118.90
1	1A	588	U	O5'-P-OP2	-8.03	98.47	105.70
1	1A	1639	U	O5'-P-OP2	-7.98	98.52	105.70
1	1A	801	G	O5'-P-OP2	-7.74	98.74	105.70
1	2A	2185	C	C2-N3-C4	7.71	123.75	119.90
1	1A	570	G	C5-C6-O6	-7.70	123.98	128.60
1	1A	1086	A	N1-C6-N6	-7.64	114.01	118.60
1	1A	1043	C	OP1-P-OP2	7.62	131.03	119.60
1	1A	570	G	C5-C6-N1	7.51	115.25	111.50
32	2a	1003	G	C8-N9-C4	-7.47	103.41	106.40
1	2A	512	G	O4'-C1'-N9	7.33	114.06	108.20
1	1A	2577	A	O5'-P-OP1	-7.32	99.12	105.70
1	2A	1092	C	C6-N1-C2	-7.21	117.42	120.30
32	2a	1158	C	C6-N1-C2	-7.20	117.42	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	2a	1158	C	N1-C2-O2	7.16	123.19	118.90
1	1A	787	U	O5'-P-OP1	-7.12	99.29	105.70
1	1A	1042	G	OP2-P-O3'	-7.09	89.60	105.20
1	1A	1075	C	N1-C2-O2	7.07	123.14	118.90
1	1A	2023	G	O5'-P-OP1	-7.02	99.38	105.70
32	2a	1003	G	N3-C4-C5	-6.98	125.11	128.60
1	1A	1352	U	O5'-P-OP1	-6.97	99.43	105.70
27	15	58	LEU	CA-CB-CG	6.96	131.31	115.30
2	1B	57	A	N9-C4-C5	-6.92	103.03	105.80
32	2a	266	G	P-O3'-C3'	6.90	127.98	119.70
1	1A	226	G	O4'-C1'-N9	6.87	113.70	108.20
32	1a	1067	A	P-O3'-C3'	6.81	127.87	119.70
1	2A	2152	G	C4-N9-C1'	-6.77	117.70	126.50
32	2a	1158	C	C2-N1-C1'	6.76	126.24	118.80
1	2A	1082	U	N3-C2-O2	-6.71	117.50	122.20
1	1A	845	G	O4'-C1'-N9	6.70	113.56	108.20
32	2a	1158	C	N3-C2-O2	-6.69	117.22	121.90
1	1A	1176	G	OP1-P-O3'	6.66	119.84	105.20
1	1A	2036	C	O5'-P-OP1	-6.66	99.71	105.70
1	2A	2185	C	C5-C4-N4	6.65	124.86	120.20
1	1A	2249	U	N3-C4-O4	-6.63	114.76	119.40
1	2A	2152	G	C8-N9-C1'	6.57	135.54	127.00
1	1A	1026	U	N1-C2-O2	6.53	127.37	122.80
1	2A	2185	C	N3-C4-N4	-6.52	113.44	118.00
1	1A	570	G	C4-C5-N7	6.51	113.40	110.80
1	1A	1300	U	P-O3'-C3'	6.50	127.50	119.70
1	2A	2152	G	N3-C4-N9	-6.50	122.10	126.00
32	2a	1003	G	C4-N9-C1'	6.46	134.91	126.50
32	2a	1020	U	N1-C2-O2	6.43	127.30	122.80
1	2A	2130	U	C5-C6-N1	6.39	125.89	122.70
1	1A	330	A	N3-C4-N9	-6.34	122.33	127.40
1	2A	2104	G	C5-C6-N1	-6.31	108.34	111.50
1	1A	1074	G	N3-C2-N2	6.25	124.28	119.90
32	2a	754	C	C2-N1-C1'	6.23	125.66	118.80
1	1A	1936	A	O4'-C1'-N9	6.21	113.16	108.20
1	1A	2848	G	O4'-C1'-N9	6.17	113.13	108.20
1	1A	2689	U	N3-C2-O2	-6.16	117.89	122.20
1	1A	1026	U	N3-C2-O2	-6.15	117.90	122.20
1	2A	1064	C	C6-N1-C2	-6.13	117.85	120.30
1	1A	1612	C	N1-C2-O2	-6.11	115.24	118.90
32	2a	1003	G	N7-C8-N9	6.10	116.15	113.10
1	2A	1639	U	O5'-P-OP2	-6.09	100.22	105.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	1082	U	N1-C2-O2	6.07	127.05	122.80
1	1A	1372	U	N3-C4-O4	6.05	123.64	119.40
1	2A	1076	C	OP1-P-O3'	6.04	118.50	105.20
1	2A	2152	G	C6-C5-N7	6.03	134.01	130.40
1	2A	1614	A	O5'-P-OP1	-6.02	100.28	105.70
32	1a	1030(B)	C	N1-C2-O2	6.01	122.51	118.90
1	1A	1385	G	O4'-C1'-N9	5.99	113.00	108.20
1	2A	2186	G	C5-C6-O6	5.98	132.19	128.60
1	1A	996	A	O5'-P-OP1	-5.95	100.34	105.70
1	2A	2249	U	N3-C4-O4	-5.93	115.25	119.40
1	2A	2137	C	C5-C4-N4	5.92	124.35	120.20
1	1A	570	G	N3-C4-N9	5.92	129.55	126.00
1	2A	746	A	O4'-C1'-N9	5.87	112.90	108.20
32	1a	1442	G	N3-C4-C5	-5.86	125.67	128.60
32	1a	558	G	O5'-P-OP1	-5.86	100.43	105.70
32	1a	299	G	C5-C6-O6	-5.85	125.09	128.60
1	1A	1055	G	C6-N1-C2	5.85	128.61	125.10
1	2A	2104	G	C6-N1-C2	5.85	128.61	125.10
32	2a	1054	C	N1-C2-O2	5.85	122.41	118.90
1	1A	774	A	C8-N9-C4	-5.84	103.46	105.80
1	2A	2104	G	C4-N9-C1'	5.84	134.09	126.50
1	1A	1064	C	N1-C2-O2	5.83	122.40	118.90
1	2A	1992	G	P-O3'-C3'	5.79	126.65	119.70
1	2A	2689	U	P-O3'-C3'	5.79	126.65	119.70
1	1A	1104	C	C5-C4-N4	5.73	124.21	120.20
1	1A	330	A	N3-C4-C5	5.71	130.80	126.80
1	2A	2104	G	C8-N9-C1'	-5.70	119.59	127.00
1	2A	2183	C	C2-N3-C4	5.68	122.74	119.90
1	1A	2789	C	N1-C2-O2	-5.67	115.50	118.90
32	2a	1183	A	P-O3'-C3'	5.67	126.50	119.70
1	1A	383	U	C2-N1-C1'	-5.67	110.90	117.70
32	1a	1442	G	C2-N3-C4	5.65	114.73	111.90
1	1A	570	G	N9-C4-C5	-5.65	103.14	105.40
1	1A	1210	A	P-O3'-C3'	5.65	126.47	119.70
1	1A	1235	G	C5-C6-O6	-5.64	125.21	128.60
1	2A	1936	A	O4'-C1'-N9	5.63	112.70	108.20
1	2A	214	G	O4'-C1'-N9	5.62	112.70	108.20
32	1a	73	G	C5-C6-O6	5.61	131.97	128.60
1	1A	2035	G	O4'-C1'-N9	5.61	112.69	108.20
1	1A	1026	U	C2-N1-C1'	5.61	124.43	117.70
27	15	25	LEU	C-N-CA	-5.60	107.70	121.70
32	1a	1137	C	C6-N1-C2	-5.58	118.07	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1A	1175	U	P-O3'-C3'	5.58	126.39	119.70
1	2A	2689	U	N3-C2-O2	-5.57	118.30	122.20
10	1O	8	LEU	CA-CB-CG	5.56	128.08	115.30
32	2a	266	G	OP2-P-O3'	5.55	117.42	105.20
32	2a	1004	A	O4'-C1'-N9	5.55	112.64	108.20
1	1A	746	A	O4'-C1'-N9	5.54	112.64	108.20
1	2A	752	A	P-O3'-C3'	5.54	126.35	119.70
1	1A	607	U	O5'-P-OP1	-5.54	100.72	105.70
1	1A	1840	G	C5-N7-C8	-5.54	101.53	104.30
32	1a	115	G	P-O3'-C3'	5.53	126.33	119.70
1	1A	195	A	C5-N7-C8	5.53	106.66	103.90
1	2A	2473	U	C2-N1-C1'	5.51	124.31	117.70
1	1A	1064	C	C2-N3-C4	5.50	122.65	119.90
32	1a	913	A	P-O3'-C3'	5.50	126.29	119.70
1	1A	800	A	O5'-P-OP1	-5.49	100.76	105.70
32	1a	1030(B)	C	C2-N1-C1'	5.48	124.83	118.80
32	1a	1065	U	P-O3'-C3'	5.48	126.28	119.70
1	1A	450	G	N1-C6-O6	-5.48	116.61	119.90
32	2a	687	A	P-O3'-C3'	5.47	126.27	119.70
1	2A	1077	A	O5'-P-OP1	-5.44	100.81	105.70
1	1A	271(Y)	U	O4'-C1'-N1	5.43	112.55	108.20
1	2A	2172	U	P-O3'-C3'	5.42	126.20	119.70
1	2A	1092	C	C6-N1-C1'	-5.42	114.30	120.80
1	1A	2685	G	N1-C6-O6	-5.41	116.65	119.90
1	1A	1177	A	O5'-P-OP1	-5.41	100.83	105.70
1	1A	383	U	O4'-C1'-N1	5.41	112.52	108.20
1	1A	386	G	O4'-C1'-N9	5.40	112.52	108.20
32	1a	1030(B)	C	N3-C2-O2	-5.40	118.12	121.90
1	1A	250	G	C8-N9-C4	-5.40	104.24	106.40
1	2A	1064	C	C5-C6-N1	5.40	123.70	121.00
1	1A	576	U	O5'-P-OP1	-5.39	100.85	105.70
32	1a	1028	C	C2-N3-C4	5.38	122.59	119.90
32	2a	115	G	P-O3'-C3'	5.38	126.16	119.70
1	1A	1055	G	C5-C6-O6	5.37	131.82	128.60
32	2a	754	C	N1-C2-O2	5.37	122.12	118.90
1	1A	2350	C	C6-N1-C2	-5.35	118.16	120.30
1	1A	1104	C	N3-C4-N4	-5.34	114.26	118.00
1	1A	808	G	C5-C6-O6	-5.34	125.40	128.60
1	1A	1063	G	C5-C6-O6	5.32	131.79	128.60
1	2A	2602	A	O5'-P-OP2	-5.31	100.92	105.70
1	1A	1416	G	O4'-C1'-N9	5.30	112.44	108.20
1	1A	1272	A	O4'-C1'-N9	5.30	112.44	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	2A	531	C	O5'-P-OP2	-5.29	100.94	105.70
1	2A	748	G	C8-N9-C1'	5.29	133.87	127.00
1	2A	2326	C	C6-N1-C2	-5.28	118.19	120.30
32	1a	1030(B)	C	C6-N1-C2	-5.28	118.19	120.30
32	1a	955	U	C5-C4-O4	5.28	129.07	125.90
32	2a	1065	U	P-O3'-C3'	5.28	126.03	119.70
1	1A	2103	C	C2-N3-C4	5.27	122.53	119.90
1	1A	2689	U	P-O3'-C3'	5.26	126.02	119.70
1	2A	2108	C	C2-N3-C4	5.26	122.53	119.90
1	2A	383	U	O4'-C1'-N1	5.25	112.40	108.20
1	1A	1372	U	C5-C4-O4	-5.24	122.75	125.90
1	1A	1253	A	C5-N7-C8	5.24	106.52	103.90
1	1A	761	A	C5-N7-C8	5.23	106.52	103.90
1	2A	2501	C	C2-N1-C1'	-5.23	113.05	118.80
1	2A	847	U	C2-N1-C1'	5.22	123.97	117.70
32	1a	1225	A	C5-C6-N6	5.22	127.88	123.70
32	1a	991	U	P-O3'-C3'	5.21	125.95	119.70
1	2A	795	C	O5'-P-OP2	-5.21	101.01	105.70
32	2a	65	U	P-O3'-C3'	5.20	125.94	119.70
1	2A	1082	U	C2-N1-C1'	5.19	123.93	117.70
1	2A	2108	C	N1-C2-O2	5.19	122.01	118.90
32	2a	841	U	C5-C6-N1	5.17	125.28	122.70
1	1A	1653	G	C8-N9-C4	-5.16	104.33	106.40
1	1A	2789	C	C2-N1-C1'	-5.16	113.12	118.80
1	1A	1653	G	P-O3'-C3'	5.16	125.89	119.70
32	2a	955	U	C5-C4-O4	5.15	128.99	125.90
1	2A	2321	G	P-O3'-C3'	5.15	125.88	119.70
32	2a	1067	A	P-O3'-C3'	5.14	125.86	119.70
1	1A	1801	G	C5-C6-O6	-5.12	125.53	128.60
32	2a	1442	G	C4-N9-C1'	5.11	133.15	126.50
1	1A	1139	G	O5'-P-OP2	-5.11	101.10	105.70
1	1A	568	U	C5-C4-O4	-5.09	122.85	125.90
1	1A	2319	G	N3-C4-N9	-5.08	122.95	126.00
32	2a	1225	A	C5-C6-N6	5.08	127.77	123.70
1	2A	2602	A	P-O3'-C3'	5.08	125.80	119.70
1	2A	1992	G	O4'-C1'-N9	-5.08	104.14	108.20
1	1A	1176	G	P-O3'-C3'	5.07	125.78	119.70
1	2A	2287	A	O4'-C1'-N9	5.06	112.25	108.20
1	2A	510	C	N1-C2-O2	5.05	121.93	118.90
32	2a	1442	G	N3-C4-N9	5.05	129.03	126.00
1	1A	1075	C	C2-N3-C4	5.04	122.42	119.90
32	1a	266	G	P-O3'-C3'	5.03	125.74	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	1a	1225	A	C6-N1-C2	5.02	121.61	118.60
32	1a	955	U	C2-N3-C4	5.01	130.01	127.00
32	1a	1285	A	P-O3'-C3'	5.01	125.71	119.70
32	2a	1125	U	C2-N1-C1'	5.01	123.71	117.70
32	1a	1201	A	P-O3'-C3'	5.01	125.71	119.70
1	2A	2172	U	OP1-P-O3'	5.01	116.22	105.20
1	2A	1076	C	P-O3'-C3'	5.00	125.70	119.70
1	2A	1914	C	C2-N1-C1'	5.00	124.30	118.80

There are no chirality outliers.

All (6) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
26	14	52	THR	Peptide
11	1P	35	HIS	Peptide
15	1T	95	ARG	Peptide
33	1b	231	GLU	Peptide
11	2P	35	HIS	Peptide
21	2Z	136	PHE	Peptide

5.2 Too-close contacts (i)

Due to software issues we are unable to calculate clashes - this section is therefore empty.

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution.

The Analysed column shows the number of residues for which the backbone conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
3	1D	273/276 (99%)	257 (94%)	16 (6%)	0	100	100
3	2D	273/276 (99%)	258 (94%)	15 (6%)	0	100	100
4	1E	202/206 (98%)	192 (95%)	8 (4%)	2 (1%)	15	28

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
4	2E	202/206 (98%)	192 (95%)	8 (4%)	2 (1%)	15 28
5	1F	201/210 (96%)	194 (96%)	6 (3%)	1 (0%)	29 48
5	2F	201/210 (96%)	195 (97%)	5 (2%)	1 (0%)	29 48
6	1G	179/182 (98%)	165 (92%)	9 (5%)	5 (3%)	5 7
6	2G	179/182 (98%)	158 (88%)	18 (10%)	3 (2%)	9 16
7	1H	172/180 (96%)	164 (95%)	8 (5%)	0	100 100
7	2H	171/180 (95%)	155 (91%)	15 (9%)	1 (1%)	25 43
8	1I	145/148 (98%)	128 (88%)	16 (11%)	1 (1%)	22 39
8	2I	144/148 (97%)	133 (92%)	10 (7%)	1 (1%)	22 39
9	1N	138/140 (99%)	135 (98%)	3 (2%)	0	100 100
9	2N	138/140 (99%)	134 (97%)	4 (3%)	0	100 100
10	1O	120/122 (98%)	112 (93%)	8 (7%)	0	100 100
10	2O	120/122 (98%)	113 (94%)	7 (6%)	0	100 100
11	1P	147/150 (98%)	137 (93%)	9 (6%)	1 (1%)	22 39
11	2P	147/150 (98%)	136 (92%)	9 (6%)	2 (1%)	11 20
12	1Q	139/141 (99%)	134 (96%)	5 (4%)	0	100 100
12	2Q	139/141 (99%)	130 (94%)	9 (6%)	0	100 100
13	1R	116/118 (98%)	113 (97%)	3 (3%)	0	100 100
13	2R	116/118 (98%)	113 (97%)	3 (3%)	0	100 100
14	1S	108/112 (96%)	103 (95%)	5 (5%)	0	100 100
14	2S	108/112 (96%)	101 (94%)	6 (6%)	1 (1%)	17 31
15	1T	129/146 (88%)	122 (95%)	5 (4%)	2 (2%)	9 17
15	2T	129/146 (88%)	120 (93%)	8 (6%)	1 (1%)	19 35
16	1U	114/118 (97%)	114 (100%)	0	0	100 100
16	2U	114/118 (97%)	114 (100%)	0	0	100 100
17	1V	99/101 (98%)	94 (95%)	5 (5%)	0	100 100
17	2V	99/101 (98%)	96 (97%)	2 (2%)	1 (1%)	15 28
18	1W	110/113 (97%)	108 (98%)	2 (2%)	0	100 100
18	2W	110/113 (97%)	109 (99%)	1 (1%)	0	100 100
19	1X	93/96 (97%)	92 (99%)	0	1 (1%)	14 26
19	2X	93/96 (97%)	87 (94%)	5 (5%)	1 (1%)	14 26

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
20	1Y	105/110 (96%)	100 (95%)	5 (5%)	0	100 100
20	2Y	105/110 (96%)	99 (94%)	6 (6%)	0	100 100
21	1Z	201/206 (98%)	189 (94%)	10 (5%)	2 (1%)	15 28
21	2Z	199/206 (97%)	179 (90%)	19 (10%)	1 (0%)	29 48
22	10	75/85 (88%)	72 (96%)	3 (4%)	0	100 100
22	20	75/85 (88%)	70 (93%)	5 (7%)	0	100 100
23	11	95/98 (97%)	94 (99%)	0	1 (1%)	14 26
23	21	95/98 (97%)	90 (95%)	5 (5%)	0	100 100
24	12	68/72 (94%)	67 (98%)	1 (2%)	0	100 100
24	22	68/72 (94%)	66 (97%)	2 (3%)	0	100 100
25	13	57/60 (95%)	55 (96%)	2 (4%)	0	100 100
25	23	57/60 (95%)	53 (93%)	4 (7%)	0	100 100
26	14	67/71 (94%)	54 (81%)	7 (10%)	6 (9%)	1 0
26	24	67/71 (94%)	46 (69%)	17 (25%)	4 (6%)	1 1
27	15	57/60 (95%)	57 (100%)	0	0	100 100
27	25	57/60 (95%)	54 (95%)	3 (5%)	0	100 100
28	16	51/54 (94%)	49 (96%)	2 (4%)	0	100 100
28	26	51/54 (94%)	47 (92%)	4 (8%)	0	100 100
29	17	46/49 (94%)	46 (100%)	0	0	100 100
29	27	46/49 (94%)	46 (100%)	0	0	100 100
30	18	62/65 (95%)	62 (100%)	0	0	100 100
30	28	62/65 (95%)	62 (100%)	0	0	100 100
31	19	35/37 (95%)	35 (100%)	0	0	100 100
31	29	35/37 (95%)	33 (94%)	2 (6%)	0	100 100
33	1b	229/256 (90%)	195 (85%)	27 (12%)	7 (3%)	4 5
33	2b	229/256 (90%)	197 (86%)	23 (10%)	9 (4%)	3 4
34	1c	204/239 (85%)	193 (95%)	11 (5%)	0	100 100
34	2c	204/239 (85%)	176 (86%)	26 (13%)	2 (1%)	15 28
35	1d	206/209 (99%)	199 (97%)	7 (3%)	0	100 100
35	2d	206/209 (99%)	192 (93%)	14 (7%)	0	100 100
36	1e	146/162 (90%)	139 (95%)	4 (3%)	3 (2%)	7 11

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
36	2e	146/162 (90%)	135 (92%)	9 (6%)	2 (1%)	11 20
37	1f	98/101 (97%)	94 (96%)	4 (4%)	0	100 100
37	2f	98/101 (97%)	94 (96%)	4 (4%)	0	100 100
38	1g	153/156 (98%)	141 (92%)	11 (7%)	1 (1%)	22 39
38	2g	153/156 (98%)	142 (93%)	8 (5%)	3 (2%)	7 12
39	1h	135/138 (98%)	128 (95%)	7 (5%)	0	100 100
39	2h	135/138 (98%)	127 (94%)	8 (6%)	0	100 100
40	1i	125/128 (98%)	114 (91%)	10 (8%)	1 (1%)	19 35
40	2i	124/128 (97%)	105 (85%)	15 (12%)	4 (3%)	4 5
41	1j	95/105 (90%)	82 (86%)	8 (8%)	5 (5%)	2 2
41	2j	94/105 (90%)	76 (81%)	13 (14%)	5 (5%)	2 2
42	1k	112/129 (87%)	99 (88%)	13 (12%)	0	100 100
42	2k	112/129 (87%)	102 (91%)	8 (7%)	2 (2%)	8 14
43	1l	119/132 (90%)	112 (94%)	7 (6%)	0	100 100
43	2l	119/132 (90%)	110 (92%)	9 (8%)	0	100 100
44	1m	114/126 (90%)	100 (88%)	10 (9%)	4 (4%)	3 4
44	2m	112/126 (89%)	100 (89%)	10 (9%)	2 (2%)	8 14
45	1n	58/61 (95%)	55 (95%)	3 (5%)	0	100 100
45	2n	58/61 (95%)	56 (97%)	2 (3%)	0	100 100
46	1o	86/89 (97%)	79 (92%)	5 (6%)	2 (2%)	6 10
46	2o	86/89 (97%)	80 (93%)	5 (6%)	1 (1%)	13 24
47	1p	80/88 (91%)	71 (89%)	9 (11%)	0	100 100
47	2p	80/88 (91%)	71 (89%)	9 (11%)	0	100 100
48	1q	97/105 (92%)	89 (92%)	7 (7%)	1 (1%)	15 28
48	2q	97/105 (92%)	89 (92%)	8 (8%)	0	100 100
49	1r	66/88 (75%)	65 (98%)	0	1 (2%)	10 18
49	2r	66/88 (75%)	58 (88%)	8 (12%)	0	100 100
50	1s	81/93 (87%)	75 (93%)	5 (6%)	1 (1%)	13 24
50	2s	81/93 (87%)	73 (90%)	8 (10%)	0	100 100
51	1t	94/106 (89%)	85 (90%)	9 (10%)	0	100 100
51	2t	96/106 (91%)	87 (91%)	6 (6%)	3 (3%)	4 5

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
52	1u	21/27 (78%)	20 (95%)	1 (5%)	0	100	100
52	2u	21/27 (78%)	19 (90%)	2 (10%)	0	100	100
53	1y	95/113 (84%)	94 (99%)	1 (1%)	0	100	100
53	2y	94/113 (83%)	89 (95%)	5 (5%)	0	100	100
All	All	11629/12354 (94%)	10840 (93%)	689 (6%)	100 (1%)	17	31

All (100) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
4	1E	71	GLY
6	1G	47	LYS
6	1G	50	ALA
21	1Z	53	ILE
26	14	55	ARG
33	1b	8	LYS
33	1b	22	LYS
33	1b	126	GLU
44	1m	67	GLU
44	1m	107	ALA
5	2F	130	ALA
26	24	62	ARG
33	2b	9	GLU
33	2b	17	PHE
40	2i	54	ASP
41	2j	56	HIS
51	2t	100	ILE
5	1F	130	ALA
15	1T	128	GLU
26	14	45	GLY
26	14	49	PHE
33	1b	127	ILE
40	1i	11	LYS
41	1j	55	LYS
44	1m	3	ARG
50	1s	27	GLU
4	2E	71	GLY
6	2G	124	SER
7	2H	126	PRO
8	2I	117	GLU
15	2T	127	ALA
17	2V	79	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
19	2X	94	GLY
26	24	49	PHE
33	2b	16	HIS
34	2c	95	THR
36	2e	97	GLY
40	2i	43	ALA
41	2j	79	ARG
42	2k	89	ALA
4	1E	52	LEU
6	1G	43	LEU
19	1X	94	GLY
26	14	39	CYS
33	1b	129	GLU
36	1e	38	GLN
41	1j	77	PRO
44	1m	12	ASN
46	1o	87	ILE
11	2P	29	LYS
26	24	53	GLU
33	2b	22	LYS
34	2c	98	ASN
41	2j	29	ARG
51	2t	95	ALA
6	1G	51	ARG
23	11	3	LYS
33	1b	124	SER
41	1j	78	ASN
4	2E	52	LEU
6	2G	81	LYS
21	2Z	52	SER
26	24	45	GLY
33	2b	20	GLU
33	2b	95	GLN
33	2b	126	GLU
36	2e	96	PRO
38	2g	33	ASP
38	2g	109	ASN
41	2j	78	ASN
11	1P	29	LYS
15	1T	126	ALA
26	14	57	GLU
26	14	61	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
33	1b	231	GLU
38	1g	55	GLY
49	1r	27	GLY
6	2G	117	PHE
33	2b	204	ASN
38	2g	53	LYS
40	2i	11	LYS
40	2i	44	VAL
44	2m	21	TYR
21	1Z	52	SER
41	1j	26	ALA
44	2m	106	ASN
46	2o	87	ILE
36	1e	77	PRO
51	2t	102	GLY
6	1G	24	GLY
48	1q	33	GLY
11	2P	122	PRO
41	2j	37	PRO
41	1j	91	PRO
33	2b	125	PRO
8	1I	71	ILE
36	1e	22	GLY
46	1o	19	PRO
14	2S	35	ILE
42	2k	90	GLY

5.3.2 Protein sidechains (i)

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution.

The Analysed column shows the number of residues for which the sidechain conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
3	1D	214/218 (98%)	196 (92%)	18 (8%)	11 21
3	2D	215/218 (99%)	199 (93%)	16 (7%)	13 27
4	1E	164/166 (99%)	158 (96%)	6 (4%)	34 60
4	2E	164/166 (99%)	156 (95%)	8 (5%)	25 47

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
5	1F	160/166 (96%)	142 (89%)	18 (11%)	6 11
5	2F	159/166 (96%)	139 (87%)	20 (13%)	4 8
6	1G	144/156 (92%)	134 (93%)	10 (7%)	15 30
6	2G	142/156 (91%)	127 (89%)	15 (11%)	6 13
7	1H	144/148 (97%)	138 (96%)	6 (4%)	30 54
7	2H	143/148 (97%)	134 (94%)	9 (6%)	18 34
8	1I	111/124 (90%)	103 (93%)	8 (7%)	14 28
8	2I	108/124 (87%)	98 (91%)	10 (9%)	9 17
9	1N	119/119 (100%)	110 (92%)	9 (8%)	13 25
9	2N	118/119 (99%)	111 (94%)	7 (6%)	19 37
10	1O	100/100 (100%)	97 (97%)	3 (3%)	41 68
10	2O	100/100 (100%)	96 (96%)	4 (4%)	31 56
11	1P	115/116 (99%)	110 (96%)	5 (4%)	29 53
11	2P	115/116 (99%)	111 (96%)	4 (4%)	36 62
12	1Q	111/111 (100%)	102 (92%)	9 (8%)	11 23
12	2Q	111/111 (100%)	104 (94%)	7 (6%)	18 34
13	1R	101/101 (100%)	93 (92%)	8 (8%)	12 24
13	2R	101/101 (100%)	95 (94%)	6 (6%)	19 37
14	1S	87/88 (99%)	81 (93%)	6 (7%)	15 30
14	2S	85/88 (97%)	76 (89%)	9 (11%)	6 13
15	1T	115/127 (91%)	110 (96%)	5 (4%)	29 53
15	2T	113/127 (89%)	107 (95%)	6 (5%)	22 43
16	1U	93/94 (99%)	87 (94%)	6 (6%)	17 33
16	2U	93/94 (99%)	91 (98%)	2 (2%)	52 77
17	1V	81/82 (99%)	74 (91%)	7 (9%)	10 20
17	2V	80/82 (98%)	73 (91%)	7 (9%)	10 19
18	1W	90/92 (98%)	85 (94%)	5 (6%)	21 40
18	2W	90/92 (98%)	88 (98%)	2 (2%)	52 77
19	1X	77/78 (99%)	76 (99%)	1 (1%)	69 87
19	2X	77/78 (99%)	74 (96%)	3 (4%)	32 57
20	1Y	86/91 (94%)	75 (87%)	11 (13%)	4 8

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
20	2Y	86/91 (94%)	80 (93%)	6 (7%)	15 29
21	1Z	169/179 (94%)	158 (94%)	11 (6%)	17 33
21	2Z	165/179 (92%)	157 (95%)	8 (5%)	25 48
22	10	61/67 (91%)	61 (100%)	0	100 100
22	20	61/67 (91%)	58 (95%)	3 (5%)	25 47
23	11	79/83 (95%)	73 (92%)	6 (8%)	13 25
23	21	81/83 (98%)	74 (91%)	7 (9%)	10 20
24	12	65/67 (97%)	62 (95%)	3 (5%)	27 50
24	22	66/67 (98%)	59 (89%)	7 (11%)	6 13
25	13	51/52 (98%)	47 (92%)	4 (8%)	12 24
25	23	50/52 (96%)	47 (94%)	3 (6%)	19 37
26	14	58/63 (92%)	54 (93%)	4 (7%)	15 30
26	24	54/63 (86%)	47 (87%)	7 (13%)	4 7
27	15	51/52 (98%)	47 (92%)	4 (8%)	12 24
27	25	50/52 (96%)	48 (96%)	2 (4%)	31 56
28	16	51/52 (98%)	46 (90%)	5 (10%)	8 15
28	26	50/52 (96%)	46 (92%)	4 (8%)	12 23
29	17	41/42 (98%)	35 (85%)	6 (15%)	3 5
29	27	41/42 (98%)	36 (88%)	5 (12%)	5 9
30	18	54/55 (98%)	52 (96%)	2 (4%)	34 60
30	28	54/55 (98%)	51 (94%)	3 (6%)	21 40
31	19	34/34 (100%)	33 (97%)	1 (3%)	42 69
31	29	34/34 (100%)	33 (97%)	1 (3%)	42 69
33	1b	191/220 (87%)	178 (93%)	13 (7%)	16 30
33	2b	187/220 (85%)	164 (88%)	23 (12%)	4 9
34	1c	144/188 (77%)	135 (94%)	9 (6%)	18 34
34	2c	140/188 (74%)	129 (92%)	11 (8%)	12 24
35	1d	171/181 (94%)	157 (92%)	14 (8%)	11 22
35	2d	172/181 (95%)	156 (91%)	16 (9%)	9 17
36	1e	114/123 (93%)	108 (95%)	6 (5%)	22 43
36	2e	114/123 (93%)	106 (93%)	8 (7%)	15 29

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
37	1f	85/90 (94%)	76 (89%)	9 (11%)	6 13
37	2f	85/90 (94%)	78 (92%)	7 (8%)	11 22
38	1g	120/127 (94%)	111 (92%)	9 (8%)	13 26
38	2g	119/127 (94%)	108 (91%)	11 (9%)	9 18
39	1h	116/119 (98%)	108 (93%)	8 (7%)	15 30
39	2h	114/119 (96%)	105 (92%)	9 (8%)	12 24
40	1i	91/99 (92%)	78 (86%)	13 (14%)	3 6
40	2i	88/99 (89%)	77 (88%)	11 (12%)	4 8
41	1j	68/92 (74%)	63 (93%)	5 (7%)	13 27
41	2j	68/92 (74%)	61 (90%)	7 (10%)	7 14
42	1k	83/99 (84%)	81 (98%)	2 (2%)	49 74
42	2k	83/99 (84%)	78 (94%)	5 (6%)	19 37
43	1l	96/108 (89%)	92 (96%)	4 (4%)	30 54
43	2l	96/108 (89%)	91 (95%)	5 (5%)	23 44
44	1m	90/101 (89%)	85 (94%)	5 (6%)	21 40
44	2m	87/101 (86%)	81 (93%)	6 (7%)	15 30
45	1n	49/50 (98%)	44 (90%)	5 (10%)	7 14
45	2n	49/50 (98%)	43 (88%)	6 (12%)	5 9
46	1o	78/80 (98%)	73 (94%)	5 (6%)	17 33
46	2o	78/80 (98%)	74 (95%)	4 (5%)	24 45
47	1p	69/74 (93%)	61 (88%)	8 (12%)	5 10
47	2p	68/74 (92%)	63 (93%)	5 (7%)	13 27
48	1q	94/97 (97%)	93 (99%)	1 (1%)	73 89
48	2q	94/97 (97%)	90 (96%)	4 (4%)	29 53
49	1r	59/77 (77%)	56 (95%)	3 (5%)	24 45
49	2r	59/77 (77%)	57 (97%)	2 (3%)	37 63
50	1s	68/80 (85%)	65 (96%)	3 (4%)	28 52
50	2s	67/80 (84%)	61 (91%)	6 (9%)	9 19
51	1t	71/82 (87%)	68 (96%)	3 (4%)	30 54
51	2t	70/82 (85%)	64 (91%)	6 (9%)	10 20
52	1u	18/22 (82%)	18 (100%)	0	100 100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
52	2u	18/22 (82%)	17 (94%)	1 (6%)	21 40
53	1y	82/98 (84%)	79 (96%)	3 (4%)	34 60
53	2y	79/98 (81%)	70 (89%)	9 (11%)	5 11
All	All	9524/10260 (93%)	8856 (93%)	668 (7%)	15 29

All (668) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
3	1D	37	LEU
3	1D	43	ARG
3	1D	69	ARG
3	1D	88	ARG
3	1D	94	LEU
3	1D	99	ASP
3	1D	111	LEU
3	1D	113	VAL
3	1D	141	VAL
3	1D	155	LEU
3	1D	173	VAL
3	1D	193	VAL
3	1D	211	ARG
3	1D	229	VAL
3	1D	242	ARG
3	1D	259	THR
3	1D	260	ARG
3	1D	275	LYS
4	1E	7	VAL
4	1E	12	THR
4	1E	89	ASP
4	1E	93	VAL
4	1E	116	VAL
4	1E	163	GLU
5	1F	12	LEU
5	1F	18	ARG
5	1F	20	LEU
5	1F	38	ARG
5	1F	53	THR
5	1F	57	VAL
5	1F	74	ARG
5	1F	88	VAL
5	1F	110	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
5	1F	125	LEU
5	1F	132	VAL
5	1F	158	THR
5	1F	162	LEU
5	1F	170	LEU
5	1F	191	ARG
5	1F	192	LEU
5	1F	197	ASP
5	1F	201	VAL
6	1G	5	VAL
6	1G	7	LEU
6	1G	21	ARG
6	1G	45	GLU
6	1G	52	ILE
6	1G	53	LEU
6	1G	79	ASN
6	1G	82	LEU
6	1G	145	THR
6	1G	175	LEU
7	1H	24	VAL
7	1H	71	LEU
7	1H	105	LEU
7	1H	107	VAL
7	1H	119	GLU
7	1H	122	THR
8	1I	5	LEU
8	1I	9	LEU
8	1I	44	LEU
8	1I	87	LYS
8	1I	92	VAL
8	1I	101	LEU
8	1I	109	ILE
8	1I	120	ILE
9	1N	1	MET
9	1N	8	GLN
9	1N	33	LEU
9	1N	46	VAL
9	1N	48	MET
9	1N	61	ARG
9	1N	67	LEU
9	1N	99	LEU
9	1N	121	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
10	1O	8	LEU
10	1O	24	VAL
10	1O	92	GLU
11	1P	3	LEU
11	1P	59	LEU
11	1P	99	LEU
11	1P	135	LEU
11	1P	149	GLU
12	1Q	2	LEU
12	1Q	7	MET
12	1Q	35	VAL
12	1Q	55	VAL
12	1Q	75	THR
12	1Q	109	VAL
12	1Q	112	GLU
12	1Q	129	THR
12	1Q	130	LYS
13	1R	6	SER
13	1R	15	SER
13	1R	33	ARG
13	1R	36	THR
13	1R	67	LEU
13	1R	75	LEU
13	1R	100	LEU
13	1R	114	VAL
14	1S	50	SER
14	1S	52	SER
14	1S	59	LYS
14	1S	76	LYS
14	1S	80	LEU
14	1S	110	LEU
15	1T	49	VAL
15	1T	53	ARG
15	1T	82	LEU
15	1T	96	ARG
15	1T	118	ARG
16	1U	5	LYS
16	1U	31	SER
16	1U	59	ARG
16	1U	74	LEU
16	1U	108	GLU
16	1U	117	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
17	1V	32	THR
17	1V	44	LYS
17	1V	46	VAL
17	1V	51	VAL
17	1V	61	VAL
17	1V	72	VAL
17	1V	79	VAL
18	1W	11	ARG
18	1W	15	ARG
18	1W	23	LEU
18	1W	60	ASN
18	1W	67	ASP
19	1X	65	ARG
20	1Y	9	LYS
20	1Y	11	ASP
20	1Y	23	ARG
20	1Y	43	ASN
20	1Y	64	GLU
20	1Y	72	VAL
20	1Y	73	ARG
20	1Y	86	ARG
20	1Y	92	ASN
20	1Y	99	CYS
20	1Y	107	ASP
21	1Z	40	ASP
21	1Z	61	LEU
21	1Z	76	LEU
21	1Z	86	VAL
21	1Z	91	LEU
21	1Z	93	ASP
21	1Z	94	GLU
21	1Z	119	GLU
21	1Z	155	LEU
21	1Z	161	VAL
21	1Z	191	VAL
23	11	30	VAL
23	11	46	LEU
23	11	51	VAL
23	11	57	GLU
23	11	59	THR
23	11	91	LYS
24	12	53	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
24	12	55	ARG
24	12	70	GLN
25	13	17	LYS
25	13	23	LEU
25	13	31	LEU
25	13	37	LEU
26	14	49	PHE
26	14	50	VAL
26	14	60	GLN
26	14	61	ARG
27	15	6	VAL
27	15	16	ARG
27	15	40	LYS
27	15	58	LEU
28	16	6	ARG
28	16	19	ARG
28	16	44	ARG
28	16	48	VAL
28	16	52	VAL
29	17	1	MET
29	17	24	THR
29	17	43	THR
29	17	46	VAL
29	17	47	ARG
29	17	48	LYS
30	18	23	VAL
30	18	31	HIS
31	19	33	LYS
33	1b	10	LEU
33	1b	15	VAL
33	1b	19	HIS
33	1b	43	ASP
33	1b	96	ARG
33	1b	111	ARG
33	1b	119	GLU
33	1b	128	GLU
33	1b	158	LEU
33	1b	160	ASP
33	1b	163	PHE
33	1b	185	ILE
33	1b	212	GLN
34	1c	3	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	1c	16	ARG
34	1c	36	ASP
34	1c	55	VAL
34	1c	70	VAL
34	1c	102	ASN
34	1c	104	GLN
34	1c	105	GLU
34	1c	144	SER
35	1d	8	VAL
35	1d	17	VAL
35	1d	26	CYS
35	1d	58	LEU
35	1d	76	ARG
35	1d	127	THR
35	1d	135	LEU
35	1d	140	VAL
35	1d	157	LEU
35	1d	168	ARG
35	1d	188	LEU
35	1d	190	ASP
35	1d	194	LEU
35	1d	196	LEU
36	1e	10	MET
36	1e	34	VAL
36	1e	64	ARG
36	1e	69	VAL
36	1e	80	ILE
36	1e	126	ARG
37	1f	17	SER
37	1f	40	VAL
37	1f	48	LEU
37	1f	54	LYS
37	1f	64	GLN
37	1f	69	GLU
37	1f	72	VAL
37	1f	73	ASN
37	1f	86	ARG
38	1g	6	ARG
38	1g	13	GLN
38	1g	52	GLU
38	1g	59	LEU
38	1g	94	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
38	1g	104	LEU
38	1g	106	GLN
38	1g	113	GLU
38	1g	138	LYS
39	1h	25	ASP
39	1h	51	VAL
39	1h	54	ASP
39	1h	63	LEU
39	1h	102	ARG
39	1h	104	ARG
39	1h	105	ARG
39	1h	133	LEU
40	1i	14	VAL
40	1i	17	VAL
40	1i	50	LEU
40	1i	54	ASP
40	1i	56	LEU
40	1i	64	THR
40	1i	65	VAL
40	1i	81	ILE
40	1i	92	TYR
40	1i	103	THR
40	1i	104	ARG
40	1i	113	LYS
40	1i	125	TYR
41	1j	5	ARG
41	1j	38	ILE
41	1j	55	LYS
41	1j	67	THR
41	1j	100	THR
42	1k	16	SER
42	1k	116	HIS
43	1l	18	VAL
43	1l	24	VAL
43	1l	41	ARG
43	1l	46	LYS
44	1m	3	ARG
44	1m	70	LEU
44	1m	80	ARG
44	1m	86	CYS
44	1m	106	ASN
45	1n	13	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
45	1n	18	VAL
45	1n	29	ARG
45	1n	33	VAL
45	1n	44	LEU
46	1o	39	LEU
46	1o	47	LYS
46	1o	76	GLU
46	1o	84	LYS
46	1o	88	ARG
47	1p	2	VAL
47	1p	8	ARG
47	1p	20	VAL
47	1p	42	ARG
47	1p	61	SER
47	1p	62	VAL
47	1p	67	THR
47	1p	74	LEU
48	1q	97	SER
49	1r	25	THR
49	1r	31	LEU
49	1r	85	LEU
50	1s	5	LEU
50	1s	28	LYS
50	1s	35	SER
51	1t	15	ARG
51	1t	37	SER
51	1t	70	SER
53	1y	3	MET
53	1y	42	SER
53	1y	46	GLN
3	2D	3	VAL
3	2D	38	LYS
3	2D	61	LEU
3	2D	64	ILE
3	2D	103	ARG
3	2D	113	VAL
3	2D	141	VAL
3	2D	147	LEU
3	2D	155	LEU
3	2D	162	SER
3	2D	173	VAL
3	2D	211	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	2D	229	VAL
3	2D	242	ARG
3	2D	259	THR
3	2D	274	ARG
4	2E	7	VAL
4	2E	9	VAL
4	2E	12	THR
4	2E	89	ASP
4	2E	113	PHE
4	2E	116	VAL
4	2E	163	GLU
4	2E	188	VAL
5	2F	15	SER
5	2F	17	ARG
5	2F	20	LEU
5	2F	27	GLU
5	2F	33	LEU
5	2F	38	ARG
5	2F	53	THR
5	2F	57	VAL
5	2F	60	SER
5	2F	74	ARG
5	2F	120	GLU
5	2F	126	VAL
5	2F	140	LEU
5	2F	158	THR
5	2F	161	GLU
5	2F	170	LEU
5	2F	175	THR
5	2F	183	VAL
5	2F	192	LEU
5	2F	201	VAL
6	2G	3	LEU
6	2G	5	VAL
6	2G	7	LEU
6	2G	28	VAL
6	2G	39	ILE
6	2G	43	LEU
6	2G	49	ASP
6	2G	80	PHE
6	2G	106	LEU
6	2G	113	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
6	2G	116	ASP
6	2G	133	LEU
6	2G	139	LEU
6	2G	159	VAL
6	2G	165	THR
7	2H	33	LEU
7	2H	47	GLU
7	2H	81	GLU
7	2H	88	LEU
7	2H	95	ARG
7	2H	133	VAL
7	2H	134	SER
7	2H	136	ILE
7	2H	148	ILE
8	2I	31	LEU
8	2I	38	LEU
8	2I	40	THR
8	2I	51	ILE
8	2I	57	ARG
8	2I	68	LEU
8	2I	69	LYS
8	2I	76	THR
8	2I	92	VAL
8	2I	102	SER
9	2N	28	THR
9	2N	34	LEU
9	2N	38	HIS
9	2N	48	MET
9	2N	67	LEU
9	2N	99	LEU
9	2N	115	ARG
10	2O	20	MET
10	2O	24	VAL
10	2O	53	LYS
10	2O	98	VAL
11	2P	99	LEU
11	2P	106	LEU
11	2P	135	LEU
11	2P	149	GLU
12	2Q	7	MET
12	2Q	22	LYS
12	2Q	55	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
12	2Q	75	THR
12	2Q	98	LYS
12	2Q	109	VAL
12	2Q	111	GLU
13	2R	33	ARG
13	2R	36	THR
13	2R	86	ARG
13	2R	100	LEU
13	2R	113	LEU
13	2R	114	VAL
14	2S	5	THR
14	2S	12	PHE
14	2S	17	ARG
14	2S	23	ARG
14	2S	25	ARG
14	2S	27	SER
14	2S	36	TYR
14	2S	48	LEU
14	2S	52	SER
15	2T	17	THR
15	2T	28	VAL
15	2T	39	ARG
15	2T	40	THR
15	2T	53	ARG
15	2T	89	VAL
16	2U	70	ARG
16	2U	74	LEU
17	2V	12	TYR
17	2V	18	LEU
17	2V	35	LEU
17	2V	46	VAL
17	2V	62	LEU
17	2V	79	VAL
17	2V	98	GLU
18	2W	11	ARG
18	2W	63	ASP
19	2X	45	THR
19	2X	50	LYS
19	2X	57	LEU
20	2Y	2	ARG
20	2Y	6	HIS
20	2Y	67	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
20	2Y	70	SER
20	2Y	72	VAL
20	2Y	99	CYS
21	2Z	41	LEU
21	2Z	72	ARG
21	2Z	107	THR
21	2Z	128	VAL
21	2Z	148	ASP
21	2Z	155	LEU
21	2Z	170	THR
21	2Z	185	GLU
22	20	11	ARG
22	20	55	ARG
22	20	68	GLU
23	21	11	ARG
23	21	21	ARG
23	21	40	ARG
23	21	51	VAL
23	21	59	THR
23	21	80	LEU
23	21	85	LEU
24	22	1	MET
24	22	25	VAL
24	22	32	LEU
24	22	40	SER
24	22	53	LEU
24	22	62	THR
24	22	70	GLN
25	23	23	LEU
25	23	31	LEU
25	23	54	VAL
26	24	21	VAL
26	24	37	SER
26	24	40	HIS
26	24	53	GLU
26	24	61	ARG
26	24	62	ARG
26	24	63	TYR
27	25	6	VAL
27	25	40	LYS
28	26	14	THR
28	26	48	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
28	26	50	ARG
28	26	52	VAL
29	27	1	MET
29	27	24	THR
29	27	43	THR
29	27	46	VAL
29	27	48	LYS
30	28	23	VAL
30	28	31	HIS
30	28	34	TRP
31	29	6	SER
33	2b	7	VAL
33	2b	8	LYS
33	2b	9	GLU
33	2b	24	TRP
33	2b	28	PHE
33	2b	44	LEU
33	2b	45	GLN
33	2b	52	GLU
33	2b	56	ARG
33	2b	67	THR
33	2b	76	GLN
33	2b	80	ILE
33	2b	81	VAL
33	2b	83	MET
33	2b	96	ARG
33	2b	111	ARG
33	2b	118	LEU
33	2b	127	ILE
33	2b	157	ARG
33	2b	160	ASP
33	2b	189	ASP
33	2b	200	ILE
33	2b	208	ILE
34	2c	3	ASN
34	2c	15	THR
34	2c	33	LEU
34	2c	52	LEU
34	2c	115	LEU
34	2c	127	ARG
34	2c	143	GLU
34	2c	152	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	2c	157	ILE
34	2c	206	GLU
34	2c	207	VAL
35	2d	3	ARG
35	2d	5	ILE
35	2d	28	SER
35	2d	31	CYS
35	2d	34	GLU
35	2d	53	ASP
35	2d	59	ARG
35	2d	80	GLU
35	2d	83	SER
35	2d	106	TYR
35	2d	135	LEU
35	2d	157	LEU
35	2d	166	LYS
35	2d	170	VAL
35	2d	175	SER
35	2d	190	ASP
36	2e	31	LEU
36	2e	34	VAL
36	2e	38	GLN
36	2e	64	ARG
36	2e	65	ASN
36	2e	75	THR
36	2e	112	LEU
36	2e	143	ARG
37	2f	10	LEU
37	2f	22	GLU
37	2f	61	LEU
37	2f	69	GLU
37	2f	73	ASN
37	2f	75	LEU
37	2f	81	ILE
38	2g	8	GLU
38	2g	9	VAL
38	2g	15	ASP
38	2g	51	GLN
38	2g	57	GLU
38	2g	75	VAL
38	2g	113	GLU
38	2g	115	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
38	2g	131	LYS
38	2g	153	HIS
38	2g	155	ARG
39	2h	10	LEU
39	2h	21	LYS
39	2h	29	SER
39	2h	37	ARG
39	2h	84	ARG
39	2h	85	ARG
39	2h	109	ILE
39	2h	112	LEU
39	2h	133	LEU
40	2i	7	THR
40	2i	27	THR
40	2i	28	VAL
40	2i	33	PHE
40	2i	40	LEU
40	2i	75	ASP
40	2i	102	LEU
40	2i	107	ARG
40	2i	108	VAL
40	2i	109	VAL
40	2i	125	TYR
41	2j	16	LEU
41	2j	29	ARG
41	2j	30	SER
41	2j	34	VAL
41	2j	47	PHE
41	2j	95	GLU
41	2j	98	ILE
42	2k	18	ARG
42	2k	79	SER
42	2k	84	VAL
42	2k	116	HIS
42	2k	117	ASN
43	2l	18	VAL
43	2l	55	VAL
43	2l	59	ARG
43	2l	81	SER
43	2l	83	VAL
44	2m	15	VAL
44	2m	17	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
44	2m	19	LEU
44	2m	65	LYS
44	2m	90	LEU
44	2m	106	ASN
45	2n	3	ARG
45	2n	13	THR
45	2n	18	VAL
45	2n	33	VAL
45	2n	42	ILE
45	2n	57	ARG
46	2o	3	ILE
46	2o	39	LEU
46	2o	76	GLU
46	2o	88	ARG
47	2p	1	MET
47	2p	38	TYR
47	2p	44	THR
47	2p	45	THR
47	2p	49	LEU
48	2q	16	GLN
48	2q	60	ILE
48	2q	70	ARG
48	2q	78	GLU
49	2r	31	LEU
49	2r	37	VAL
50	2s	41	VAL
50	2s	48	THR
50	2s	63	THR
50	2s	66	MET
50	2s	77	THR
50	2s	81	ARG
51	2t	15	ARG
51	2t	20	LEU
51	2t	24	LEU
51	2t	45	GLN
51	2t	62	LEU
51	2t	84	LEU
52	2u	24	ARG
53	2y	3	MET
53	2y	8	LYS
53	2y	9	GLN
53	2y	11	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
53	2y	16	ILE
53	2y	24	LEU
53	2y	26	LYS
53	2y	29	LYS
53	2y	32	THR

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (101) such sidechains are listed below:

Mol	Chain	Res	Type
3	1D	87	ASN
3	1D	253	GLN
4	1E	48	GLN
5	1F	8	GLN
5	1F	69	HIS
5	1F	203	GLN
6	1G	26	GLN
9	1N	69	GLN
10	1O	3	GLN
14	1S	68	GLN
15	1T	58	ASN
15	1T	123	GLN
18	1W	60	ASN
19	1X	31	HIS
19	1X	82	GLN
20	1Y	43	ASN
20	1Y	92	ASN
21	1Z	73	GLN
22	10	35	ASN
23	11	56	GLN
25	13	32	GLN
27	15	22	HIS
33	1b	212	GLN
34	1c	6	HIS
34	1c	28	GLN
34	1c	37	GLN
34	1c	69	HIS
34	1c	102	ASN
34	1c	104	GLN
35	1d	45	GLN
35	1d	77	ASN
35	1d	119	GLN
35	1d	123	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
35	1d	125	HIS
35	1d	129	ASN
36	1e	56	GLN
37	1f	73	ASN
38	1g	13	GLN
38	1g	28	ASN
38	1g	64	GLN
38	1g	86	GLN
38	1g	153	HIS
40	1i	3	GLN
40	1i	87	GLN
41	1j	56	HIS
43	1l	99	HIS
46	1o	28	GLN
47	1p	13	HIS
47	1p	16	HIS
48	1q	16	GLN
50	1s	69	HIS
50	1s	83	HIS
53	1y	38	HIS
3	2D	253	GLN
4	2E	48	GLN
5	2F	69	HIS
5	2F	133	ASN
5	2F	203	GLN
6	2G	79	ASN
7	2H	143	GLN
7	2H	147	ASN
8	2I	43	ASN
8	2I	104	GLN
8	2I	139	GLN
11	2P	27	HIS
12	2Q	89	ASN
12	2Q	123	HIS
13	2R	71	GLN
17	2V	64	HIS
21	2Z	73	GLN
23	21	56	GLN
24	22	70	GLN
25	23	32	GLN
33	2b	40	HIS
33	2b	113	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	2c	6	HIS
34	2c	63	ASN
34	2c	69	HIS
34	2c	176	HIS
35	2d	42	GLN
35	2d	77	ASN
35	2d	116	GLN
35	2d	123	HIS
35	2d	161	ASN
36	2e	20	GLN
36	2e	65	ASN
37	2f	64	GLN
38	2g	13	GLN
41	2j	62	HIS
41	2j	68	HIS
42	2k	99	GLN
43	2l	99	HIS
44	2m	12	ASN
44	2m	77	ASN
46	2o	9	GLN
46	2o	28	GLN
50	2s	23	ASN
50	2s	83	HIS
51	2t	90	GLN
53	2y	9	GLN
53	2y	46	GLN

5.3.3 RNA (i)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	1A	2863/2915 (98%)	397 (13%)	31 (1%)
1	2A	2856/2915 (97%)	460 (16%)	38 (1%)
2	1B	119/121 (98%)	12 (10%)	0
2	2B	119/121 (98%)	18 (15%)	0
32	1a	1494/1521 (98%)	239 (15%)	0
32	2a	1498/1521 (98%)	238 (15%)	0
All	All	8949/9114 (98%)	1364 (15%)	69 (0%)

All (1364) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	1A	12	U
1	1A	13	A
1	1A	14	A
1	1A	15	G
1	1A	34	C
1	1A	45	C
1	1A	71	A
1	1A	74	A
1	1A	75	G
1	1A	95	G
1	1A	118	A
1	1A	119	A
1	1A	120	U
1	1A	196	A
1	1A	199	A
1	1A	205	G
1	1A	214	G
1	1A	215	G
1	1A	216	A
1	1A	222	A
1	1A	229	A
1	1A	248	G
1	1A	271(I)	G
1	1A	271(K)	U
1	1A	271(L)	U
1	1A	271(M)	G
1	1A	271(N)	U
1	1A	271(O)	C
1	1A	272(A)	U
1	1A	272(B)	G
1	1A	275	G
1	1A	279	C
1	1A	280	C
1	1A	311	A
1	1A	330	A
1	1A	345	A
1	1A	352	G
1	1A	363	G
1	1A	363(B)	G
1	1A	386	G
1	1A	396	G
1	1A	405	U
1	1A	411	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1A	412	A
1	1A	421	U
1	1A	422	A
1	1A	428	A
1	1A	448	U
1	1A	451	C
1	1A	454	A
1	1A	456	C
1	1A	457	A
1	1A	481	G
1	1A	494	G
1	1A	505	A
1	1A	509	C
1	1A	512	G
1	1A	528	A
1	1A	530	G
1	1A	531	C
1	1A	532	A
1	1A	533	G
1	1A	545	G
1	1A	549	G
1	1A	563	G
1	1A	573	G
1	1A	575	A
1	1A	586	A
1	1A	603	A
1	1A	604	G
1	1A	607	U
1	1A	614(B)	G
1	1A	615	G
1	1A	627	A
1	1A	637	A
1	1A	645	C
1	1A	646	A
1	1A	652(T)	C
1	1A	652(U)	G
1	1A	652(V)	C
1	1A	668	G
1	1A	669	G
1	1A	686	G
1	1A	730	C
1	1A	747	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1A	775	G
1	1A	776	G
1	1A	782	A
1	1A	784	A
1	1A	785	G
1	1A	792	G
1	1A	805	G
1	1A	812	C
1	1A	827	U
1	1A	828	U
1	1A	859	G
1	1A	866	A
1	1A	879	G
1	1A	882	G
1	1A	884	C
1	1A	885	C
1	1A	886	C
1	1A	888	C
1	1A	889	C
1	1A	890	A
1	1A	892	G
1	1A	896	A
1	1A	897	C
1	1A	899	A
1	1A	910	A
1	1A	932	G
1	1A	945	A
1	1A	946	G
1	1A	961	C
1	1A	974	G
1	1A	975	C
1	1A	983	A
1	1A	996	A
1	1A	1012	U
1	1A	1013	C
1	1A	1026	U
1	1A	1033	U
1	1A	1039	G
1	1A	1042	G
1	1A	1043	C
1	1A	1045	A
1	1A	1046	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1A	1047	G
1	1A	1053	C
1	1A	1054	A
1	1A	1060	U
1	1A	1061	U
1	1A	1062	G
1	1A	1063	G
1	1A	1065	U
1	1A	1066	U
1	1A	1068	G
1	1A	1069	A
1	1A	1070	A
1	1A	1071	G
1	1A	1073	A
1	1A	1075	C
1	1A	1076	C
1	1A	1077	A
1	1A	1078	U
1	1A	1079	C
1	1A	1087	G
1	1A	1088	A
1	1A	1090	U
1	1A	1096	A
1	1A	1097	U
1	1A	1101	U
1	1A	1104	C
1	1A	1109	C
1	1A	1110	G
1	1A	1112	G
1	1A	1128	A
1	1A	1129	A
1	1A	1135	C
1	1A	1136	G
1	1A	1155	A
1	1A	1171	G
1	1A	1173	G
1	1A	1174	A
1	1A	1175	U
1	1A	1176	G
1	1A	1177	A
1	1A	1178	C
1	1A	1210	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1A	1211	U
1	1A	1218	C
1	1A	1253	A
1	1A	1256	G
1	1A	1271	G
1	1A	1272	A
1	1A	1300	U
1	1A	1301	A
1	1A	1303	G
1	1A	1321	A
1	1A	1345	C
1	1A	1352	U
1	1A	1359	A
1	1A	1360	A
1	1A	1365	A
1	1A	1370	C
1	1A	1380	G
1	1A	1384	A
1	1A	1385	G
1	1A	1395	A
1	1A	1416	G
1	1A	1417	C
1	1A	1420	U
1	1A	1421	G
1	1A	1428	C
1	1A	1445	A
1	1A	1450	G
1	1A	1452	A
1	1A	1455	G
1	1A	1467	C
1	1A	1471	A
1	1A	1482	G
1	1A	1493	C
1	1A	1505	C
1	1A	1508	A
1	1A	1509	C
1	1A	1509(A)	A
1	1A	1525	G
1	1A	1539	G
1	1A	1542	A
1	1A	1543	C
1	1A	1558	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1A	1566	A
1	1A	1569	A
1	1A	1578	U
1	1A	1579	A
1	1A	1580	A
1	1A	1581	G
1	1A	1582	C
1	1A	1584	C
1	1A	1586	A
1	1A	1608	A
1	1A	1609	A
1	1A	1610	A
1	1A	1648	C
1	1A	1654	A
1	1A	1674	G
1	1A	1700	A
1	1A	1701	A
1	1A	1722	A
1	1A	1756	G
1	1A	1757	U
1	1A	1758	G
1	1A	1763	G
1	1A	1764	G
1	1A	1773	A
1	1A	1780	A
1	1A	1782	C
1	1A	1791	A
1	1A	1800	C
1	1A	1801	G
1	1A	1816	G
1	1A	1829	A
1	1A	1847	A
1	1A	1877	A
1	1A	1878	G
1	1A	1889	A
1	1A	1900	A
1	1A	1906	G
1	1A	1913	A
1	1A	1914	C
1	1A	1929	G
1	1A	1930	G
1	1A	1931	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1A	1937	A
1	1A	1938	A
1	1A	1955	U
1	1A	1963	U
1	1A	1967	C
1	1A	1970	A
1	1A	1971	A
1	1A	1972	A
1	1A	1993	U
1	1A	1997	G
1	1A	2020	A
1	1A	2023	G
1	1A	2031	A
1	1A	2032	G
1	1A	2033	A
1	1A	2043	C
1	1A	2055	C
1	1A	2056	G
1	1A	2060	A
1	1A	2061	G
1	1A	2069	G
1	1A	2103	C
1	1A	2104	G
1	1A	2107	C
1	1A	2108	C
1	1A	2111	C
1	1A	2112	G
1	1A	2116	G
1	1A	2117	A
1	1A	2119	A
1	1A	2123	G
1	1A	2126	A
1	1A	2127	G
1	1A	2131	G
1	1A	2132	U
1	1A	2133	G
1	1A	2134	A
1	1A	2135	A
1	1A	2138	C
1	1A	2139	C
1	1A	2142	C
1	1A	2146	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1A	2148	G
1	1A	2154	G
1	1A	2158	A
1	1A	2159	G
1	1A	2160	G
1	1A	2162	G
1	1A	2172	U
1	1A	2173	A
1	1A	2176	A
1	1A	2178	C
1	1A	2185	C
1	1A	2186	G
1	1A	2187	G
1	1A	2189	U
1	1A	2190	G
1	1A	2192	G
1	1A	2198	A
1	1A	2206	G
1	1A	2207	G
1	1A	2208	A
1	1A	2225	A
1	1A	2238	G
1	1A	2239	G
1	1A	2268	A
1	1A	2279	G
1	1A	2283	C
1	1A	2287	A
1	1A	2289	G
1	1A	2305	A
1	1A	2308	G
1	1A	2320	A
1	1A	2321	G
1	1A	2325	G
1	1A	2326	C
1	1A	2327	A
1	1A	2334	G
1	1A	2336	A
1	1A	2347	C
1	1A	2350	C
1	1A	2383	G
1	1A	2385	C
1	1A	2406	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1A	2422	A
1	1A	2425	A
1	1A	2428	G
1	1A	2429	G
1	1A	2430	A
1	1A	2431	U
1	1A	2434	A
1	1A	2435	A
1	1A	2439	A
1	1A	2441	C
1	1A	2448	A
1	1A	2468	G
1	1A	2469	A
1	1A	2476	A
1	1A	2478	A
1	1A	2491	U
1	1A	2502	G
1	1A	2505	G
1	1A	2506	U
1	1A	2518	A
1	1A	2529	G
1	1A	2535	G
1	1A	2549	G
1	1A	2554	U
1	1A	2555	U
1	1A	2566	A
1	1A	2567	G
1	1A	2573	C
1	1A	2602	A
1	1A	2603	G
1	1A	2609	U
1	1A	2611	U
1	1A	2612	C
1	1A	2629	A
1	1A	2630	G
1	1A	2654	A
1	1A	2662	A
1	1A	2689	U
1	1A	2690	C
1	1A	2702	U
1	1A	2703	C
1	1A	2712(A)	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1A	2713	A
1	1A	2726	U
1	1A	2733	A
1	1A	2758	A
1	1A	2761	G
1	1A	2765	A
1	1A	2766	G
1	1A	2778	A
1	1A	2790	A
1	1A	2791	C
1	1A	2802	G
1	1A	2820	A
1	1A	2821	A
1	1A	2833	G
1	1A	2835	A
1	1A	2872	G
1	1A	2892	A
1	1A	2894	G
2	1B	2	C
2	1B	7	G
2	1B	13	A
2	1B	30	C
2	1B	45	A
2	1B	53	A
2	1B	56	G
2	1B	67	G
2	1B	73	A
2	1B	84	C
2	1B	106	G
2	1B	110	G
32	1a	6	G
32	1a	9	G
32	1a	32	A
32	1a	39	G
32	1a	47	C
32	1a	48	C
32	1a	50	A
32	1a	51	A
32	1a	53	A
32	1a	61	G
32	1a	78	G
32	1a	79	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	1a	96	U
32	1a	101	A
32	1a	116	A
32	1a	121	C
32	1a	131	C
32	1a	143	A
32	1a	144	G
32	1a	156	G
32	1a	163	C
32	1a	169	C
32	1a	173	U
32	1a	174	C
32	1a	182	U
32	1a	189(F)	U
32	1a	189(G)	G
32	1a	195	A
32	1a	197	A
32	1a	202	U
32	1a	203	U
32	1a	204	U
32	1a	216	G
32	1a	220	G
32	1a	247	G
32	1a	251	G
32	1a	253	U
32	1a	258	G
32	1a	266	G
32	1a	267	C
32	1a	289	G
32	1a	321	A
32	1a	328	C
32	1a	332	G
32	1a	352	C
32	1a	353	A
32	1a	354	G
32	1a	356	A
32	1a	367	U
32	1a	372	C
32	1a	373	A
32	1a	384	G
32	1a	397	A
32	1a	398	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	1a	406	G
32	1a	412	A
32	1a	413	G
32	1a	422	C
32	1a	423	G
32	1a	424	G
32	1a	427	U
32	1a	429	U
32	1a	439	A
32	1a	442	C
32	1a	452	A
32	1a	456	C
32	1a	461	A
32	1a	470	C
32	1a	475	G
32	1a	480	U
32	1a	485	G
32	1a	496	A
32	1a	498	U
32	1a	505	G
32	1a	509	A
32	1a	510	A
32	1a	511	C
32	1a	514	C
32	1a	518	C
32	1a	521	G
32	1a	531	U
32	1a	532	A
32	1a	547	A
32	1a	550	G
32	1a	559	A
32	1a	561	U
32	1a	564	C
32	1a	572	A
32	1a	573	A
32	1a	576	G
32	1a	577	G
32	1a	592	G
32	1a	607	A
32	1a	619	U
32	1a	630	G
32	1a	631	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	1a	632	A
32	1a	633	G
32	1a	653	A
32	1a	661	G
32	1a	665	A
32	1a	666	G
32	1a	671	G
32	1a	687	A
32	1a	688	G
32	1a	723	U
32	1a	731	G
32	1a	734	G
32	1a	753	A
32	1a	755	G
32	1a	774	G
32	1a	777	A
32	1a	793	U
32	1a	794	A
32	1a	815	A
32	1a	817	C
32	1a	828	A
32	1a	829	G
32	1a	836	G
32	1a	839	U
32	1a	840	C
32	1a	841	U
32	1a	870	U
32	1a	891	U
32	1a	902	G
32	1a	914	A
32	1a	926	G
32	1a	927	G
32	1a	934	C
32	1a	935	A
32	1a	960	U
32	1a	961	U
32	1a	968	A
32	1a	969	A
32	1a	971	G
32	1a	974	A
32	1a	975	A
32	1a	976	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	1a	977	A
32	1a	992	U
32	1a	993	G
32	1a	998	G
32	1a	999	C
32	1a	1001	A
32	1a	1001(A)	G
32	1a	1022	G
32	1a	1023	G
32	1a	1024	G
32	1a	1025	U
32	1a	1026	G
32	1a	1027	C
32	1a	1028	C
32	1a	1029	C
32	1a	1030	C
32	1a	1030(A)	G
32	1a	1030(B)	C
32	1a	1030(C)	G
32	1a	1030(D)	A
32	1a	1032	G
32	1a	1033	G
32	1a	1037	C
32	1a	1042	G
32	1a	1044	A
32	1a	1053	G
32	1a	1065	U
32	1a	1066	C
32	1a	1068	G
32	1a	1081	G
32	1a	1094	G
32	1a	1095	U
32	1a	1101	A
32	1a	1124	G
32	1a	1130	A
32	1a	1132	C
32	1a	1133	G
32	1a	1134	G
32	1a	1136	U
32	1a	1137	C
32	1a	1139	G
32	1a	1140	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	1a	1144	G
32	1a	1146	A
32	1a	1150	U
32	1a	1152	A
32	1a	1159	U
32	1a	1163	C
32	1a	1168	A
32	1a	1183	A
32	1a	1184	G
32	1a	1193	G
32	1a	1196	U
32	1a	1197	G
32	1a	1202	G
32	1a	1208	C
32	1a	1212	U
32	1a	1213	A
32	1a	1224	G
32	1a	1227	A
32	1a	1238	A
32	1a	1256	A
32	1a	1257	U
32	1a	1258	G
32	1a	1270	C
32	1a	1278	U
32	1a	1279	A
32	1a	1280	A
32	1a	1286	A
32	1a	1287	A
32	1a	1299	A
32	1a	1300	G
32	1a	1302	U
32	1a	1312	G
32	1a	1320	C
32	1a	1322	C
32	1a	1338	G
32	1a	1340	A
32	1a	1346	A
32	1a	1347	G
32	1a	1353	G
32	1a	1363	C
32	1a	1370	G
32	1a	1397	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	1a	1419	G
32	1a	1442	G
32	1a	1442(A)	G
32	1a	1447	A
32	1a	1452	C
32	1a	1456	G
32	1a	1492	A
32	1a	1493	A
32	1a	1503	A
32	1a	1504	G
32	1a	1505	G
32	1a	1506	U
32	1a	1517	G
32	1a	1520	G
32	1a	1529	G
32	1a	1530	G
32	1a	1531	A
1	2A	10	G
1	2A	12	U
1	2A	14	A
1	2A	15	G
1	2A	34	C
1	2A	45	C
1	2A	61	G
1	2A	71	A
1	2A	74	A
1	2A	75	G
1	2A	84	A
1	2A	95	G
1	2A	104	U
1	2A	118	A
1	2A	119	A
1	2A	120	U
1	2A	131	G
1	2A	141	A
1	2A	157	U
1	2A	181	A
1	2A	182	A
1	2A	196	A
1	2A	199	A
1	2A	205	G
1	2A	215	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2A	216	A
1	2A	221	A
1	2A	222	A
1	2A	229	A
1	2A	230	U
1	2A	248	G
1	2A	271(K)	U
1	2A	271(L)	U
1	2A	271(M)	G
1	2A	271(N)	U
1	2A	271(O)	C
1	2A	272(A)	U
1	2A	272(B)	G
1	2A	277	C
1	2A	278	A
1	2A	311	A
1	2A	312	G
1	2A	317	G
1	2A	324	A
1	2A	329	G
1	2A	330	A
1	2A	333	G
1	2A	352	G
1	2A	362	U
1	2A	363	G
1	2A	386	G
1	2A	396	G
1	2A	405	U
1	2A	411	G
1	2A	412	A
1	2A	428	A
1	2A	429	A
1	2A	444	C
1	2A	455	C
1	2A	456	C
1	2A	457	A
1	2A	470	A
1	2A	481	G
1	2A	505	A
1	2A	509	C
1	2A	530	G
1	2A	531	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2A	532	A
1	2A	533	G
1	2A	545	G
1	2A	563	G
1	2A	573	G
1	2A	575	A
1	2A	603	A
1	2A	604	G
1	2A	607	U
1	2A	614(B)	G
1	2A	614(C)	A
1	2A	615	G
1	2A	616	G
1	2A	627	A
1	2A	634	C
1	2A	637	A
1	2A	645	C
1	2A	646	A
1	2A	652(B)	A
1	2A	652(C)	G
1	2A	652(U)	G
1	2A	653	A
1	2A	669	G
1	2A	686	G
1	2A	702	G
1	2A	730	C
1	2A	740	U
1	2A	752	A
1	2A	753	C
1	2A	765	G
1	2A	775	G
1	2A	776	G
1	2A	782	A
1	2A	784	A
1	2A	785	G
1	2A	792	G
1	2A	805	G
1	2A	812	C
1	2A	827	U
1	2A	828	U
1	2A	857	C
1	2A	859	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2A	866	A
1	2A	869	G
1	2A	877	U
1	2A	880	G
1	2A	883	G
1	2A	886	C
1	2A	887	A
1	2A	888	C
1	2A	889	C
1	2A	890	A
1	2A	893	C
1	2A	896	A
1	2A	900	A
1	2A	901	A
1	2A	910	A
1	2A	917	A
1	2A	932	G
1	2A	938	G
1	2A	941	A
1	2A	945	A
1	2A	946	G
1	2A	953	A
1	2A	959	A
1	2A	961	C
1	2A	968	G
1	2A	974	G
1	2A	975	C
1	2A	983	A
1	2A	996	A
1	2A	1006	C
1	2A	1012	U
1	2A	1013	C
1	2A	1026	U
1	2A	1033	U
1	2A	1038	C
1	2A	1042	G
1	2A	1044	G
1	2A	1046	A
1	2A	1047	G
1	2A	1048	A
1	2A	1052	C
1	2A	1053	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2A	1054	A
1	2A	1058	G
1	2A	1060	U
1	2A	1064	C
1	2A	1065	U
1	2A	1066	U
1	2A	1067	A
1	2A	1068	G
1	2A	1069	A
1	2A	1070	A
1	2A	1071	G
1	2A	1072	C
1	2A	1073	A
1	2A	1074	G
1	2A	1076	C
1	2A	1077	A
1	2A	1078	U
1	2A	1079	C
1	2A	1082	U
1	2A	1083	U
1	2A	1084	A
1	2A	1085	A
1	2A	1086	A
1	2A	1088	A
1	2A	1090	U
1	2A	1091	G
1	2A	1092	C
1	2A	1093	G
1	2A	1096	A
1	2A	1097	U
1	2A	1108	U
1	2A	1109	C
1	2A	1110	G
1	2A	1111	A
1	2A	1112	G
1	2A	1116	C
1	2A	1117	G
1	2A	1129	A
1	2A	1130	U
1	2A	1135	C
1	2A	1136	G
1	2A	1171	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2A	1211	U
1	2A	1212	G
1	2A	1220	A
1	2A	1236	G
1	2A	1244	G
1	2A	1253	A
1	2A	1256	G
1	2A	1271	G
1	2A	1272	A
1	2A	1287	A
1	2A	1300	U
1	2A	1301	A
1	2A	1303	G
1	2A	1314	C
1	2A	1319	G
1	2A	1321	A
1	2A	1352	U
1	2A	1359	A
1	2A	1360	A
1	2A	1365	A
1	2A	1368	G
1	2A	1379	A
1	2A	1384	A
1	2A	1385	G
1	2A	1386	C
1	2A	1416	G
1	2A	1417	C
1	2A	1420	U
1	2A	1421	G
1	2A	1428	C
1	2A	1445	A
1	2A	1450	G
1	2A	1455	G
1	2A	1459	G
1	2A	1467	C
1	2A	1471	A
1	2A	1482	G
1	2A	1493	C
1	2A	1494	A
1	2A	1497	U
1	2A	1508	A
1	2A	1509	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2A	1509(A)	A
1	2A	1531	C
1	2A	1537	G
1	2A	1542	A
1	2A	1543	C
1	2A	1547	C
1	2A	1558	A
1	2A	1566	A
1	2A	1569	A
1	2A	1578	U
1	2A	1580	A
1	2A	1584	C
1	2A	1586	A
1	2A	1608	A
1	2A	1609	A
1	2A	1640	C
1	2A	1648	C
1	2A	1654	A
1	2A	1664	A
1	2A	1674	G
1	2A	1696	G
1	2A	1700	A
1	2A	1701	A
1	2A	1721	G
1	2A	1722	A
1	2A	1750	G
1	2A	1756	G
1	2A	1762	A
1	2A	1763	G
1	2A	1764	G
1	2A	1773	A
1	2A	1780	A
1	2A	1782	C
1	2A	1791	A
1	2A	1800	C
1	2A	1801	G
1	2A	1816	G
1	2A	1817	G
1	2A	1829	A
1	2A	1835	G
1	2A	1839	G
1	2A	1847	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2A	1848	A
1	2A	1877	A
1	2A	1878	G
1	2A	1889	A
1	2A	1900	A
1	2A	1906	G
1	2A	1914	C
1	2A	1927	A
1	2A	1929	G
1	2A	1930	G
1	2A	1937	A
1	2A	1938	A
1	2A	1955	U
1	2A	1963	U
1	2A	1967	C
1	2A	1970	A
1	2A	1971	A
1	2A	1972	A
1	2A	1975	G
1	2A	1992	G
1	2A	1993	U
1	2A	1997	G
1	2A	2020	A
1	2A	2023	G
1	2A	2031	A
1	2A	2033	A
1	2A	2043	C
1	2A	2055	C
1	2A	2056	G
1	2A	2060	A
1	2A	2061	G
1	2A	2069	G
1	2A	2096	U
1	2A	2099	U
1	2A	2103	C
1	2A	2105	C
1	2A	2107	C
1	2A	2108	C
1	2A	2109	U
1	2A	2112	G
1	2A	2115	G
1	2A	2116	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2A	2117	A
1	2A	2118	U
1	2A	2119	A
1	2A	2121	G
1	2A	2123	G
1	2A	2126	A
1	2A	2127	G
1	2A	2129	C
1	2A	2130	U
1	2A	2132	U
1	2A	2133	G
1	2A	2134	A
1	2A	2136	C
1	2A	2145	C
1	2A	2146	C
1	2A	2147	G
1	2A	2148	G
1	2A	2150	U
1	2A	2151	G
1	2A	2153	G
1	2A	2158	A
1	2A	2159	G
1	2A	2161	C
1	2A	2163	C
1	2A	2164	C
1	2A	2165	G
1	2A	2166	G
1	2A	2168	G
1	2A	2172	U
1	2A	2173	A
1	2A	2178	C
1	2A	2180	U
1	2A	2184	G
1	2A	2186	G
1	2A	2187	G
1	2A	2189	U
1	2A	2192	G
1	2A	2198	A
1	2A	2206	G
1	2A	2207	G
1	2A	2208	A
1	2A	2218	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2A	2219	G
1	2A	2225	A
1	2A	2238	G
1	2A	2239	G
1	2A	2268	A
1	2A	2269	A
1	2A	2275	C
1	2A	2278	A
1	2A	2280	G
1	2A	2283	C
1	2A	2287	A
1	2A	2289	G
1	2A	2293	C
1	2A	2305	A
1	2A	2308	G
1	2A	2309	A
1	2A	2310	A
1	2A	2311	A
1	2A	2319	G
1	2A	2320	A
1	2A	2321	G
1	2A	2322	A
1	2A	2325	G
1	2A	2326	C
1	2A	2334	G
1	2A	2335	A
1	2A	2336	A
1	2A	2343	C
1	2A	2347	C
1	2A	2350	C
1	2A	2379	G
1	2A	2383	G
1	2A	2385	C
1	2A	2406	U
1	2A	2414	G
1	2A	2422	A
1	2A	2425	A
1	2A	2429	G
1	2A	2430	A
1	2A	2435	A
1	2A	2439	A
1	2A	2441	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2A	2448	A
1	2A	2468	G
1	2A	2474	C
1	2A	2476	A
1	2A	2478	A
1	2A	2491	U
1	2A	2492	U
1	2A	2498	C
1	2A	2502	G
1	2A	2505	G
1	2A	2506	U
1	2A	2518	A
1	2A	2529	G
1	2A	2543	G
1	2A	2554	U
1	2A	2555	U
1	2A	2566	A
1	2A	2567	G
1	2A	2573	C
1	2A	2602	A
1	2A	2603	G
1	2A	2609	U
1	2A	2611	U
1	2A	2612	C
1	2A	2615	U
1	2A	2629	A
1	2A	2630	G
1	2A	2654	A
1	2A	2663	G
1	2A	2682	U
1	2A	2689	U
1	2A	2690	C
1	2A	2691	C
1	2A	2703	C
1	2A	2712(A)	A
1	2A	2713	A
1	2A	2714	G
1	2A	2726	U
1	2A	2733	A
1	2A	2744	G
1	2A	2752	C
1	2A	2757	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2A	2764	A
1	2A	2765	A
1	2A	2778	A
1	2A	2789	C
1	2A	2802	G
1	2A	2803	C
1	2A	2811	G
1	2A	2820	A
1	2A	2821	A
1	2A	2833	G
1	2A	2835	A
1	2A	2872	G
1	2A	2880	C
1	2A	2891	G
1	2A	2894	G
2	2B	2	C
2	2B	8	U
2	2B	9	G
2	2B	12	C
2	2B	13	A
2	2B	22	U
2	2B	33	G
2	2B	35	U
2	2B	45	A
2	2B	51	G
2	2B	56	G
2	2B	73	A
2	2B	84	C
2	2B	90	A
2	2B	94	C
2	2B	106	G
2	2B	109	C
2	2B	110	G
32	2a	5	U
32	2a	9	G
32	2a	22	G
32	2a	29	G
32	2a	32	A
32	2a	39	G
32	2a	47	C
32	2a	48	C
32	2a	50	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	2a	51	A
32	2a	61	G
32	2a	66	G
32	2a	89	C
32	2a	101	A
32	2a	116	A
32	2a	121	C
32	2a	131	C
32	2a	156	G
32	2a	163	C
32	2a	173	U
32	2a	174	C
32	2a	182	U
32	2a	189(F)	U
32	2a	195	A
32	2a	197	A
32	2a	202	U
32	2a	203	U
32	2a	204	U
32	2a	216	G
32	2a	220	G
32	2a	231	G
32	2a	247	G
32	2a	251	G
32	2a	258	G
32	2a	266	G
32	2a	267	C
32	2a	289	G
32	2a	318	G
32	2a	321	A
32	2a	328	C
32	2a	332	G
32	2a	351	G
32	2a	352	C
32	2a	353	A
32	2a	354	G
32	2a	367	U
32	2a	372	C
32	2a	373	A
32	2a	384	G
32	2a	396	G
32	2a	397	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	2a	398	C
32	2a	406	G
32	2a	412	A
32	2a	413	G
32	2a	421	U
32	2a	424	G
32	2a	429	U
32	2a	430	A
32	2a	439	A
32	2a	442	C
32	2a	452	A
32	2a	461	A
32	2a	470	C
32	2a	482	A
32	2a	485	G
32	2a	496	A
32	2a	498	U
32	2a	505	G
32	2a	506	G
32	2a	509	A
32	2a	510	A
32	2a	511	C
32	2a	518	C
32	2a	521	G
32	2a	532	A
32	2a	533	A
32	2a	547	A
32	2a	559	A
32	2a	561	U
32	2a	564	C
32	2a	572	A
32	2a	573	A
32	2a	576	G
32	2a	577	G
32	2a	596	C
32	2a	630	G
32	2a	631	G
32	2a	633	G
32	2a	653	A
32	2a	665	A
32	2a	685	G
32	2a	687	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	2a	688	G
32	2a	695	A
32	2a	705	U
32	2a	723	U
32	2a	724	G
32	2a	731	G
32	2a	735	C
32	2a	749	C
32	2a	755	G
32	2a	763	G
32	2a	773	G
32	2a	774	G
32	2a	777	A
32	2a	785	G
32	2a	793	U
32	2a	794	A
32	2a	802	A
32	2a	817	C
32	2a	821	G
32	2a	827	U
32	2a	828	A
32	2a	829	G
32	2a	838	G
32	2a	840	C
32	2a	841	U
32	2a	851	G
32	2a	859	A
32	2a	914	A
32	2a	916	G
32	2a	926	G
32	2a	927	G
32	2a	931	C
32	2a	934	C
32	2a	935	A
32	2a	960	U
32	2a	961	U
32	2a	966	M2G
32	2a	968	A
32	2a	969	A
32	2a	971	G
32	2a	972	C
32	2a	974	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	2a	975	A
32	2a	976	G
32	2a	977	A
32	2a	984	C
32	2a	989	C
32	2a	992	U
32	2a	993	G
32	2a	994	A
32	2a	1004	A
32	2a	1005	A
32	2a	1006	C
32	2a	1009	G
32	2a	1017	G
32	2a	1020	U
32	2a	1025	U
32	2a	1026	G
32	2a	1027	C
32	2a	1028	C
32	2a	1029	C
32	2a	1030(A)	G
32	2a	1030(B)	C
32	2a	1033	G
32	2a	1041	A
32	2a	1044	A
32	2a	1047	G
32	2a	1053	G
32	2a	1054	C
32	2a	1055	A
32	2a	1056	U
32	2a	1065	U
32	2a	1066	C
32	2a	1068	G
32	2a	1081	G
32	2a	1094	G
32	2a	1100	C
32	2a	1101	A
32	2a	1104	G
32	2a	1113	C
32	2a	1117	G
32	2a	1122	U
32	2a	1125	U
32	2a	1129	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	2a	1130	A
32	2a	1136	U
32	2a	1137	C
32	2a	1139	G
32	2a	1147	C
32	2a	1152	A
32	2a	1157	A
32	2a	1159	U
32	2a	1162	C
32	2a	1183	A
32	2a	1184	G
32	2a	1196	U
32	2a	1197	G
32	2a	1211	U
32	2a	1212	U
32	2a	1214	C
32	2a	1224	G
32	2a	1227	A
32	2a	1236	A
32	2a	1238	A
32	2a	1248	A
32	2a	1256	A
32	2a	1257	U
32	2a	1258	G
32	2a	1260	C
32	2a	1270	C
32	2a	1278	U
32	2a	1279	A
32	2a	1281	U
32	2a	1282	C
32	2a	1286	A
32	2a	1287	A
32	2a	1300	G
32	2a	1302	U
32	2a	1303	C
32	2a	1317	C
32	2a	1340	A
32	2a	1346	A
32	2a	1347	G
32	2a	1349	A
32	2a	1353	G
32	2a	1363	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	2a	1363(A)	A
32	2a	1370	G
32	2a	1397	C
32	2a	1419	G
32	2a	1442	G
32	2a	1442(A)	G
32	2a	1446	U
32	2a	1447	A
32	2a	1456	G
32	2a	1460	A
32	2a	1477	C
32	2a	1492	A
32	2a	1503	A
32	2a	1504	G
32	2a	1506	U
32	2a	1517	G
32	2a	1520	G
32	2a	1529	G
32	2a	1530	G

All (69) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	1A	196	A
1	1A	266	G
1	1A	271(K)	U
1	1A	278	A
1	1A	685	A
1	1A	746	A
1	1A	764	A
1	1A	839	U
1	1A	888	C
1	1A	895	U
1	1A	974	G
1	1A	1065	U
1	1A	1067	A
1	1A	1142(A)	A
1	1A	1175	U
1	1A	1176	G
1	1A	1210	A
1	1A	1300	U
1	1A	1379	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1A	1442	G
1	1A	1608	A
1	1A	1653	G
1	1A	2116	G
1	1A	2126	A
1	1A	2288	A
1	1A	2406	U
1	1A	2422	A
1	1A	2430	A
1	1A	2602	A
1	1A	2611	U
1	1A	2689	U
1	2A	195	A
1	2A	196	A
1	2A	249	C
1	2A	266	G
1	2A	271(M)	G
1	2A	277	C
1	2A	746	A
1	2A	752	A
1	2A	764	A
1	2A	774	A
1	2A	827	U
1	2A	840	C
1	2A	856	C
1	2A	900	A
1	2A	974	G
1	2A	993	G
1	2A	1053	C
1	2A	1057	A
1	2A	1065	U
1	2A	1067	A
1	2A	1073	A
1	2A	1076	C
1	2A	1210	A
1	2A	1420	U
1	2A	1442	G
1	2A	1491	G
1	2A	1493	C
1	2A	1992	G
1	2A	2126	A
1	2A	2171	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2A	2172	U
1	2A	2321	G
1	2A	2406	U
1	2A	2439	A
1	2A	2601	C
1	2A	2602	A
1	2A	2689	U
1	2A	2756	U

5.4 Non-standard residues in protein, DNA, RNA chains (i)

48 non-standard protein/DNA/RNA residues are modelled in this entry.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
32	5MC	2a	1400	32	18,22,23	0.96	2 (11%)	26,32,35	1.21	2 (7%)
32	5MC	1a	1407	32	18,22,23	0.96	2 (11%)	26,32,35	1.14	4 (15%)
32	PSU	2a	516	54,32	18,21,22	1.33	2 (11%)	22,30,33	1.95	5 (22%)
32	PSU	1a	516	54,32	18,21,22	1.38	2 (11%)	22,30,33	1.82	4 (18%)
32	2MG	2a	1207	32	18,26,27	0.91	1 (5%)	16,38,41	1.05	1 (6%)
32	MA6	1a	1518	32	19,26,27	0.80	0	18,38,41	1.29	2 (11%)
32	4OC	2a	1402	32	20,23,24	0.77	0	26,32,35	0.94	1 (3%)
32	MA6	2a	1518	32	19,26,27	0.84	0	18,38,41	1.39	2 (11%)
1	PSU	1A	2605	1	18,21,22	1.44	3 (16%)	22,30,33	1.88	4 (18%)
1	5MU	2A	1915	1	19,22,23	1.43	4 (21%)	28,32,35	2.19	8 (28%)
1	2MA	1A	2503	1,54	17,25,26	0.98	1 (5%)	17,37,40	0.94	2 (11%)
1	5MC	2A	1942	1,54	18,22,23	0.99	2 (11%)	26,32,35	1.24	2 (7%)
43	0TD	2l	92	43	7,9,10	4.86	1 (14%)	6,11,13	7.23	2 (33%)
32	5MC	1a	1404	32	18,22,23	0.94	1 (5%)	26,32,35	1.13	2 (7%)
1	5MC	1A	1942	1,54	18,22,23	0.97	2 (11%)	26,32,35	1.09	1 (3%)
1	2MA	2A	2503	1,54	17,25,26	1.03	2 (11%)	17,37,40	0.99	2 (11%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
1	PSU	2A	2605	1	18,21,22	1.36	4 (22%)	22,30,33	1.95	4 (18%)
1	2MU	1A	2552	1,54	19,22,24	1.23	2 (10%)	26,31,36	1.88	6 (23%)
32	UR3	1a	1498	32	19,22,23	1.05	2 (10%)	26,32,35	1.55	3 (11%)
32	5MC	2a	1404	32	18,22,23	1.00	2 (11%)	26,32,35	1.15	3 (11%)
1	2MU	2A	2552	1,54	19,22,24	1.31	4 (21%)	26,31,36	1.63	4 (15%)
32	MA6	2a	1519	32	19,26,27	0.83	0	18,38,41	1.56	2 (11%)
1	PSU	2A	1917	1	18,21,22	1.33	2 (11%)	22,30,33	1.94	3 (13%)
32	2MG	1a	1207	32	18,26,27	1.00	1 (5%)	16,38,41	1.45	3 (18%)
1	PSU	1A	1911	1	18,21,22	1.35	2 (11%)	22,30,33	1.87	4 (18%)
32	5MC	2a	967	32	18,22,23	0.97	2 (11%)	26,32,35	1.03	2 (7%)
1	5MC	2A	1962	1,54	18,22,23	0.99	2 (11%)	26,32,35	1.21	2 (7%)
1	PSU	1A	1917	1,54	18,21,22	1.31	2 (11%)	22,30,33	1.83	3 (13%)
32	4OC	1a	1402	32	20,23,24	0.75	1 (5%)	26,32,35	0.95	1 (3%)
32	5MC	1a	967	32	18,22,23	0.96	2 (11%)	26,32,35	1.15	2 (7%)
43	0TD	1l	92	43	7,9,10	4.74	1 (14%)	6,11,13	7.02	3 (50%)
1	PSU	2A	1911	1	18,21,22	1.37	3 (16%)	22,30,33	1.85	5 (22%)
1	5MU	1A	1939	1,54	19,22,23	1.42	4 (21%)	28,32,35	2.11	6 (21%)
32	G7M	1a	527	54,32	20,26,27	2.64	4 (20%)	17,39,42	1.03	2 (11%)
1	OMC	1A	1920	1	19,22,23	0.85	0	26,31,34	0.96	1 (3%)
32	G7M	2a	527	54,32	20,26,27	2.65	4 (20%)	17,39,42	0.91	1 (5%)
32	M2G	1a	966	32	20,27,28	1.40	3 (15%)	22,40,43	1.03	2 (9%)
32	MA6	1a	1519	32	19,26,27	0.82	0	18,38,41	1.44	2 (11%)
1	OMG	1A	2251	1,54	18,26,27	1.03	1 (5%)	19,38,41	1.09	2 (10%)
1	OMC	2A	1920	1	19,22,23	0.81	0	26,31,34	0.85	1 (3%)
32	M2G	2a	966	32	20,27,28	1.46	3 (15%)	22,40,43	0.89	1 (4%)
32	5MC	2a	1407	32	18,22,23	0.98	2 (11%)	26,32,35	1.18	3 (11%)
1	5MC	1A	1962	1,54	18,22,23	1.00	2 (11%)	26,32,35	1.08	3 (11%)
1	5MU	2A	1939	1,54	19,22,23	1.39	5 (26%)	28,32,35	2.26	7 (25%)
32	5MC	1a	1400	32	18,22,23	1.02	2 (11%)	26,32,35	1.14	2 (7%)
1	OMG	2A	2251	1,54	18,26,27	0.99	1 (5%)	19,38,41	0.98	2 (10%)
1	5MU	1A	1915	1,54	19,22,23	1.48	5 (26%)	28,32,35	2.25	9 (32%)
32	UR3	2a	1498	54,32	19,22,23	1.02	2 (10%)	26,32,35	1.35	1 (3%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the

Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
32	5MC	2a	1400	32	-	0/7/25/26	0/2/2/2
32	5MC	1a	1407	32	-	0/7/25/26	0/2/2/2
32	PSU	2a	516	54,32	-	0/7/25/26	0/2/2/2
32	PSU	1a	516	54,32	-	0/7/25/26	0/2/2/2
32	2MG	2a	1207	32	-	2/5/27/28	0/3/3/3
32	MA6	1a	1518	32	-	0/7/29/30	0/3/3/3
32	4OC	2a	1402	32	-	2/9/29/30	0/2/2/2
32	MA6	2a	1518	32	-	0/7/29/30	0/3/3/3
1	PSU	1A	2605	1	-	0/7/25/26	0/2/2/2
1	5MU	2A	1915	1	-	2/7/25/26	0/2/2/2
1	2MA	1A	2503	1,54	-	2/3/25/26	0/3/3/3
1	5MC	2A	1942	1,54	-	0/7/25/26	0/2/2/2
43	0TD	2l	92	43	-	1/7/12/14	-
32	5MC	1a	1404	32	-	0/7/25/26	0/2/2/2
1	5MC	1A	1942	1,54	-	0/7/25/26	0/2/2/2
1	2MA	2A	2503	1,54	-	1/3/25/26	0/3/3/3
1	PSU	2A	2605	1	-	0/7/25/26	0/2/2/2
1	2MU	1A	2552	1,54	-	0/9/27/28	0/2/2/2
32	UR3	1a	1498	32	-	0/7/25/26	0/2/2/2
32	5MC	2a	1404	32	-	0/7/25/26	0/2/2/2
1	2MU	2A	2552	1,54	-	0/9/27/28	0/2/2/2
32	MA6	2a	1519	32	-	2/7/29/30	0/3/3/3
1	PSU	2A	1917	1	-	0/7/25/26	0/2/2/2
32	2MG	1a	1207	32	-	2/5/27/28	0/3/3/3
1	PSU	1A	1911	1	-	2/7/25/26	0/2/2/2
32	5MC	2a	967	32	-	0/7/25/26	0/2/2/2
1	5MC	2A	1962	1,54	-	2/7/25/26	0/2/2/2
1	PSU	1A	1917	1,54	-	0/7/25/26	0/2/2/2
32	4OC	1a	1402	32	-	2/9/29/30	0/2/2/2
32	5MC	1a	967	32	-	0/7/25/26	0/2/2/2
43	0TD	1l	92	43	-	1/7/12/14	-
1	PSU	2A	1911	1	-	0/7/25/26	0/2/2/2
1	5MU	1A	1939	1,54	-	0/7/25/26	0/2/2/2
32	G7M	1a	527	54,32	-	1/3/25/26	0/3/3/3
1	OMC	1A	1920	1	-	3/9/27/28	0/2/2/2
32	G7M	2a	527	54,32	-	2/3/25/26	0/3/3/3
32	M2G	1a	966	32	-	0/7/29/30	0/3/3/3
32	MA6	1a	1519	32	-	2/7/29/30	0/3/3/3

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
1	OMG	1A	2251	1,54	-	1/5/27/28	0/3/3/3
1	OMC	2A	1920	1	-	0/9/27/28	0/2/2/2
32	M2G	2a	966	32	-	0/7/29/30	0/3/3/3
32	5MC	2a	1407	32	-	0/7/25/26	0/2/2/2
1	5MC	1A	1962	1,54	-	0/7/25/26	0/2/2/2
1	5MU	2A	1939	1,54	-	0/7/25/26	0/2/2/2
32	5MC	1a	1400	32	-	0/7/25/26	0/2/2/2
1	OMG	2A	2251	1,54	-	0/5/27/28	0/3/3/3
1	5MU	1A	1915	1,54	-	2/7/25/26	0/2/2/2
32	UR3	2a	1498	54,32	-	0/7/25/26	0/2/2/2

All (95) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
43	2l	92	0TD	CB-SB	-12.47	1.69	1.82
43	1l	92	0TD	CB-SB	-12.12	1.69	1.82
32	1a	527	G7M	C8-N9	7.74	1.47	1.33
32	2a	527	G7M	C8-N9	7.73	1.47	1.33
32	2a	527	G7M	C8-N7	7.04	1.46	1.33
32	1a	527	G7M	C8-N7	6.90	1.45	1.33
32	2a	966	M2G	C2-N3	4.60	1.36	1.30
32	1a	527	G7M	C5-C4	4.37	1.47	1.39
32	2a	527	G7M	C5-C4	4.33	1.47	1.39
32	1a	966	M2G	C2-N3	4.32	1.35	1.30
1	1A	2605	PSU	C6-C5	3.59	1.39	1.35
32	1a	516	PSU	C6-C5	3.51	1.39	1.35
1	1A	1911	PSU	C6-C5	3.35	1.39	1.35
1	2A	1911	PSU	C6-C5	3.34	1.39	1.35
1	1A	1917	PSU	C6-C5	3.29	1.39	1.35
1	1A	1939	5MU	C6-C5	3.17	1.39	1.34
32	1a	1400	5MC	C6-C5	3.13	1.39	1.34
32	2a	516	PSU	C6-C5	3.08	1.38	1.35
1	1A	1915	5MU	C2-N1	3.06	1.43	1.38
1	1A	2605	PSU	C4-N3	-3.05	1.33	1.38
32	1a	1404	5MC	C6-C5	2.97	1.39	1.34
1	1A	1942	5MC	C6-C5	2.94	1.39	1.34
1	2A	1917	PSU	C6-C5	2.92	1.38	1.35
32	2a	1407	5MC	C6-C5	2.90	1.39	1.34
32	2a	1404	5MC	C6-C5	2.89	1.39	1.34
1	2A	1915	5MU	C2-N1	2.89	1.43	1.38
32	2a	967	5MC	C6-C5	2.89	1.39	1.34
1	2A	1915	5MU	C6-C5	2.88	1.39	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	2a	1400	5MC	C6-C5	2.80	1.39	1.34
1	2A	2552	2MU	C4-N3	-2.80	1.33	1.38
1	1A	1915	5MU	C4-N3	-2.78	1.33	1.38
1	2A	2605	PSU	C6-C5	2.77	1.38	1.35
1	2A	1942	5MC	C6-C5	2.77	1.39	1.34
1	2A	2605	PSU	C4-N3	-2.77	1.33	1.38
1	2A	1962	5MC	C6-C5	2.75	1.39	1.34
1	1A	1915	5MU	C6-C5	2.75	1.39	1.34
32	1a	1407	5MC	C6-C5	2.73	1.39	1.34
1	2A	1911	PSU	C4-N3	-2.71	1.33	1.38
1	1A	1962	5MC	C6-C5	2.71	1.39	1.34
32	1a	967	5MC	C6-C5	2.70	1.39	1.34
1	1A	1962	5MC	C6-N1	-2.70	1.33	1.38
1	2A	1939	5MU	C6-C5	2.68	1.39	1.34
1	2A	2251	OMG	C6-N1	-2.63	1.33	1.37
32	1a	966	M2G	C6-N1	-2.62	1.34	1.37
1	1A	1939	5MU	C4-N3	-2.60	1.34	1.38
32	2a	966	M2G	C2-N2	2.60	1.40	1.35
32	1a	966	M2G	C2-N2	2.57	1.40	1.35
1	2A	1939	5MU	C4-C5	2.54	1.49	1.44
32	1a	1207	2MG	C6-N1	-2.52	1.34	1.37
1	2A	1915	5MU	C4-N3	-2.51	1.34	1.38
1	2A	1939	5MU	C6-N1	-2.50	1.33	1.38
1	2A	1939	5MU	C4-N3	-2.50	1.34	1.38
1	1A	1911	PSU	C4-N3	-2.48	1.34	1.38
32	2a	516	PSU	C4-N3	-2.47	1.34	1.38
1	1A	1939	5MU	C4-C5	2.46	1.48	1.44
32	2a	966	M2G	C6-N1	-2.44	1.34	1.37
1	2A	1917	PSU	C4-N3	-2.43	1.34	1.38
1	1A	2251	OMG	C6-N1	-2.40	1.34	1.37
1	1A	1917	PSU	C4-N3	-2.35	1.34	1.38
1	1A	2552	2MU	C4-N3	-2.34	1.34	1.38
1	2A	1942	5MC	C6-N1	-2.33	1.34	1.38
1	2A	2552	2MU	C2-N3	-2.32	1.33	1.38
1	1A	1915	5MU	C4-C5	2.31	1.48	1.44
1	2A	1962	5MC	C6-N1	-2.31	1.34	1.38
32	2a	1400	5MC	C6-N1	-2.26	1.34	1.38
32	1a	1400	5MC	C6-N1	-2.24	1.34	1.38
1	2A	2605	PSU	C2-N1	-2.24	1.33	1.36
1	2A	1915	5MU	C4-C5	2.24	1.48	1.44
1	2A	2503	2MA	C2-N3	2.23	1.36	1.31
1	2A	2552	2MU	C5-C4	2.23	1.48	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	2a	527	G7M	C6-N1	-2.22	1.34	1.37
32	1a	1498	UR3	C2-N1	2.22	1.41	1.38
1	1A	1939	5MU	C2-N3	-2.20	1.34	1.38
32	1a	516	PSU	C4-N3	-2.20	1.34	1.38
1	1A	2552	2MU	C5-C4	2.17	1.48	1.43
32	2a	1207	2MG	C6-N1	-2.16	1.34	1.37
32	1a	967	5MC	C6-N1	-2.15	1.34	1.38
1	1A	1942	5MC	C6-N1	-2.14	1.34	1.38
32	2a	1498	UR3	C6-C5	2.14	1.40	1.35
32	1a	527	G7M	C6-N1	-2.13	1.34	1.37
1	2A	2552	2MU	C2-N1	2.12	1.41	1.38
32	2a	1404	5MC	C6-N1	-2.12	1.34	1.38
32	1a	1498	UR3	C6-C5	2.11	1.39	1.35
1	2A	2503	2MA	C6-N1	-2.09	1.33	1.38
32	2a	1407	5MC	C6-N1	-2.09	1.34	1.38
1	1A	1915	5MU	C2-N3	-2.08	1.34	1.38
32	2a	1498	UR3	C2-N1	2.06	1.41	1.38
32	1a	1407	5MC	C6-N1	-2.06	1.34	1.38
1	2A	2605	PSU	C2-N3	-2.06	1.34	1.37
1	1A	2503	2MA	C2-N3	2.05	1.35	1.31
1	1A	2605	PSU	C2-N3	-2.03	1.34	1.37
32	1a	1402	4OC	C6-C5	2.02	1.39	1.35
1	2A	1911	PSU	C2-N3	-2.01	1.34	1.37
32	2a	967	5MC	C6-N1	-2.00	1.34	1.38
1	2A	1939	5MU	C2-N1	2.00	1.41	1.38

All (139) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
43	2l	92	0TD	CSB-SB-CB	-17.32	71.10	102.44
43	1l	92	0TD	CSB-SB-CB	-16.58	72.44	102.44
32	1a	1498	UR3	C4-N3-C2	-6.25	118.67	124.56
1	1A	2605	PSU	N1-C2-N3	6.20	122.15	115.13
1	2A	2605	PSU	N1-C2-N3	6.07	122.01	115.13
1	1A	1911	PSU	N1-C2-N3	6.04	121.97	115.13
1	2A	1911	PSU	N1-C2-N3	5.99	121.92	115.13
32	2a	516	PSU	N1-C2-N3	5.93	121.85	115.13
1	2A	1917	PSU	N1-C2-N3	5.88	121.79	115.13
1	2A	1939	5MU	C4-N3-C2	-5.73	119.93	127.35
1	1A	1917	PSU	N1-C2-N3	5.63	121.51	115.13
32	2a	1498	UR3	C4-N3-C2	-5.52	119.37	124.56
1	2A	1939	5MU	N3-C2-N1	5.49	122.18	114.89

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	1a	516	PSU	N1-C2-N3	5.38	121.23	115.13
1	1A	1939	5MU	C4-N3-C2	-5.15	120.68	127.35
1	1A	1939	5MU	N3-C2-N1	5.01	121.54	114.89
1	2A	1915	5MU	N3-C2-N1	4.97	121.49	114.89
1	1A	2552	2MU	N3-C2-N1	4.94	121.44	114.89
1	1A	1915	5MU	N3-C2-N1	4.90	121.39	114.89
32	2a	1518	MA6	N3-C2-N1	-4.85	121.11	128.68
32	2a	1519	MA6	N3-C2-N1	-4.83	121.12	128.68
1	2A	2552	2MU	N3-C2-N1	4.76	121.20	114.89
1	2A	1915	5MU	C4-N3-C2	-4.75	121.21	127.35
1	1A	1939	5MU	C5-C4-N3	4.67	119.29	115.31
1	2A	1939	5MU	C5-C4-N3	4.64	119.27	115.31
32	1a	1519	MA6	N3-C2-N1	-4.59	121.50	128.68
1	1A	1915	5MU	C4-N3-C2	-4.59	121.42	127.35
1	1A	1915	5MU	C1'-N1-C2	4.55	125.81	117.57
1	1A	1915	5MU	C5-C4-N3	4.47	119.13	115.31
1	2A	1917	PSU	O2-C2-N1	-4.35	118.00	122.79
32	1a	1518	MA6	N3-C2-N1	-4.26	122.02	128.68
1	1A	1939	5MU	C5-C6-N1	-4.20	119.02	123.34
1	1A	2552	2MU	C4-N3-C2	-4.17	121.08	126.58
1	2A	1939	5MU	O4-C4-C5	-4.11	120.13	124.90
1	2A	1915	5MU	C5-C4-N3	4.10	118.81	115.31
1	2A	2552	2MU	C4-N3-C2	-4.09	121.18	126.58
1	2A	2605	PSU	C4-N3-C2	-4.03	120.54	126.34
32	1a	1400	5MC	C5-C6-N1	-4.02	119.20	123.34
1	2A	1942	5MC	C5-C6-N1	-4.02	119.20	123.34
32	2a	516	PSU	C4-N3-C2	-4.02	120.54	126.34
1	2A	1915	5MU	C1'-N1-C2	4.01	124.83	117.57
32	2a	1400	5MC	C5-C6-N1	-3.94	119.29	123.34
1	2A	1917	PSU	C4-N3-C2	-3.88	120.75	126.34
1	2A	1911	PSU	C4-N3-C2	-3.87	120.77	126.34
1	1A	1942	5MC	C5-C6-N1	-3.86	119.36	123.34
1	2A	1915	5MU	O4-C4-C5	-3.86	120.43	124.90
32	2a	516	PSU	O2-C2-N1	-3.85	118.55	122.79
32	1a	1404	5MC	C5-C6-N1	-3.82	119.41	123.34
1	1A	1917	PSU	C4-N3-C2	-3.79	120.88	126.34
1	1A	2605	PSU	C4-N3-C2	-3.75	120.93	126.34
1	1A	1911	PSU	O2-C2-N1	-3.71	118.71	122.79
1	1A	1939	5MU	O4-C4-C5	-3.70	120.61	124.90
1	2A	1962	5MC	C5-C6-N1	-3.68	119.55	123.34
1	1A	1915	5MU	C1'-N1-C6	-3.63	115.07	121.12
1	1A	1915	5MU	O4-C4-C5	-3.63	120.69	124.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	1a	516	PSU	C4-N3-C2	-3.63	121.11	126.34
1	2A	2605	PSU	O2-C2-N1	-3.61	118.81	122.79
1	1A	2552	2MU	C2'-C1'-N1	-3.60	107.24	114.22
32	2a	967	5MC	C5-C6-N1	-3.55	119.69	123.34
1	1A	1939	5MU	O2-C2-N1	-3.52	118.10	122.79
1	1A	1911	PSU	C4-N3-C2	-3.52	121.27	126.34
32	2a	1404	5MC	C5-C6-N1	-3.45	119.79	123.34
32	2a	1519	MA6	C4-C5-N7	-3.44	105.81	109.40
43	1l	92	0TD	OD2-CG-CB	3.43	120.56	113.15
1	1A	1962	5MC	C5-C6-N1	-3.40	119.84	123.34
32	1a	516	PSU	O2-C2-N1	-3.38	119.07	122.79
1	1A	1917	PSU	O2-C2-N1	-3.37	119.08	122.79
1	2A	1939	5MU	O2-C2-N1	-3.35	118.34	122.79
32	1a	967	5MC	C5-C6-N1	-3.31	119.94	123.34
32	1a	1407	5MC	C5-C6-N1	-3.24	120.00	123.34
1	2A	1939	5MU	C5-C6-N1	-3.24	120.01	123.34
1	2A	1915	5MU	C1'-N1-C6	-3.23	115.74	121.12
32	2a	1407	5MC	C5-C6-N1	-3.09	120.16	123.34
32	1a	1519	MA6	C4-C5-N7	-3.01	106.27	109.40
1	1A	1915	5MU	O2-C2-N3	-2.99	115.94	121.50
32	2a	1404	5MC	C5-C4-N3	-2.98	118.46	121.67
1	2A	2552	2MU	C5-C4-N3	2.92	119.20	114.84
43	2l	92	0TD	OD2-CG-CB	2.88	119.37	113.15
32	2a	1407	5MC	C5-C4-N3	-2.85	118.60	121.67
32	2a	527	G7M	CN7-N7-C8	-2.79	112.02	125.43
32	1a	1498	UR3	C3U-N3-C2	2.78	122.19	117.31
1	2A	1915	5MU	C5-C6-N1	-2.73	120.53	123.34
1	1A	2552	2MU	O4-C4-C5	-2.73	120.37	125.16
1	2A	2503	2MA	C8-N7-C5	2.64	108.03	102.99
32	1a	1402	4OC	C6-C5-C4	2.64	120.19	116.96
1	1A	2552	2MU	O2-C2-N1	-2.63	119.29	122.79
32	1a	1400	5MC	C5-C4-N3	-2.60	118.86	121.67
32	1a	967	5MC	C5-C4-N3	-2.58	118.89	121.67
32	1a	1207	2MG	C8-N7-C5	2.57	107.88	102.99
32	1a	527	G7M	CN7-N7-C8	-2.56	113.09	125.43
1	1A	2251	OMG	C8-N7-C5	2.56	107.87	102.99
1	1A	1920	OMC	O2-C2-N3	-2.55	118.18	122.33
32	1a	1518	MA6	C4-C5-N7	-2.53	106.76	109.40
1	2A	1942	5MC	C5-C4-N3	-2.53	118.95	121.67
32	1a	1407	5MC	C5-C4-N3	-2.51	118.97	121.67
1	1A	2552	2MU	C5-C4-N3	2.47	118.53	114.84
1	2A	1962	5MC	C5-C4-N3	-2.44	119.05	121.67

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	2a	1400	5MC	C5-C4-N3	-2.43	119.06	121.67
1	2A	1911	PSU	O2-C2-N1	-2.39	120.17	122.79
1	1A	2605	PSU	O2-C2-N1	-2.38	120.17	122.79
32	2a	1518	MA6	C4-C5-N7	-2.37	106.93	109.40
1	2A	2503	2MA	C5-C6-N1	2.36	118.09	114.02
32	2a	1207	2MG	C8-N7-C5	2.36	107.48	102.99
32	1a	1404	5MC	C5-C4-N3	-2.35	119.14	121.67
32	2a	1407	5MC	O2-C2-N3	-2.35	118.52	122.33
32	2a	966	M2G	C8-N7-C5	2.33	107.43	102.99
1	1A	2251	OMG	C5-C6-N1	2.32	118.06	113.95
1	2A	2552	2MU	O4-C4-C5	-2.31	121.09	125.16
32	2a	516	PSU	O4'-C1'-C2'	2.31	108.41	105.14
32	2a	1402	4OC	C6-C5-C4	2.31	119.79	116.96
32	1a	1207	2MG	O3'-C3'-C2'	2.30	119.28	111.82
43	1l	92	0TD	OD1-CG-CB	-2.26	117.70	122.44
1	1A	1915	5MU	C5-C6-N1	-2.26	121.01	123.34
1	2A	1939	5MU	C5M-C5-C4	2.26	121.25	118.77
32	1a	516	PSU	C6-C5-C4	-2.26	116.62	118.20
1	1A	2503	2MA	C8-N7-C5	2.25	107.28	102.99
1	2A	1915	5MU	O2-C2-N3	-2.25	117.31	121.50
32	1a	1498	UR3	C6-N1-C2	-2.24	119.78	121.79
32	2a	1404	5MC	CM5-C5-C6	-2.23	119.86	122.85
32	1a	1207	2MG	C5-C6-N1	2.23	117.89	113.95
32	1a	966	M2G	C5-C6-N1	2.23	117.88	113.95
1	1A	2605	PSU	O2-C2-N3	-2.20	117.68	121.82
1	1A	1915	5MU	C6-N1-C2	-2.16	119.11	121.30
1	1A	1962	5MC	CM5-C5-C6	-2.15	119.97	122.85
32	2a	967	5MC	C5-C4-N3	-2.14	119.36	121.67
1	1A	1962	5MC	C5-C4-N3	-2.14	119.36	121.67
1	2A	2251	OMG	C8-N7-C5	2.13	107.06	102.99
32	1a	1407	5MC	CM5-C5-C6	-2.13	120.00	122.85
1	2A	2251	OMG	C5-C6-N1	2.10	117.66	113.95
1	2A	1920	OMC	O2-C2-N3	-2.10	118.92	122.33
1	2A	1911	PSU	C5-C6-N1	-2.09	118.97	122.11
1	1A	1911	PSU	O4'-C1'-C2'	2.09	108.09	105.14
32	1a	966	M2G	C8-N7-C5	2.09	106.96	102.99
32	2a	516	PSU	C5-C6-N1	-2.07	119.00	122.11
1	2A	1911	PSU	O2-C2-N3	-2.07	117.92	121.82
32	1a	527	G7M	O6-C6-N1	2.05	123.07	120.65
1	1A	2503	2MA	C5-C6-N1	2.02	117.50	114.02
32	1a	1407	5MC	O2-C2-N3	-2.02	119.05	122.33
1	2A	2605	PSU	C5-C6-N1	-2.01	119.10	122.11

There are no chirality outliers.

All (32) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
1	1A	1915	5MU	O4'-C1'-N1-C2
1	1A	1915	5MU	O4'-C1'-N1-C6
32	1a	1207	2MG	N1-C2-N2-CM2
32	1a	1207	2MG	N3-C2-N2-CM2
1	2A	1915	5MU	O4'-C1'-N1-C2
1	2A	1915	5MU	O4'-C1'-N1-C6
32	2a	1207	2MG	N1-C2-N2-CM2
32	2a	1207	2MG	N3-C2-N2-CM2
32	1a	1519	MA6	O4'-C4'-C5'-O5'
32	1a	1519	MA6	C3'-C4'-C5'-O5'
32	2a	1519	MA6	O4'-C4'-C5'-O5'
32	2a	527	G7M	C3'-C4'-C5'-O5'
32	2a	1519	MA6	C3'-C4'-C5'-O5'
32	2a	527	G7M	O4'-C4'-C5'-O5'
32	1a	527	G7M	C3'-C4'-C5'-O5'
32	1a	1402	4OC	O4'-C4'-C5'-O5'
1	1A	2503	2MA	C4'-C5'-O5'-P
1	1A	1911	PSU	O4'-C1'-C5-C4
32	2a	1402	4OC	O4'-C4'-C5'-O5'
1	1A	1920	OMC	C1'-C2'-O2'-CM2
1	1A	2503	2MA	O4'-C4'-C5'-O5'
1	1A	1911	PSU	O4'-C1'-C5-C6
43	1l	92	0TD	CG-CB-SB-CSB
43	2l	92	0TD	CG-CB-SB-CSB
1	1A	2251	OMG	C4'-C5'-O5'-P
1	1A	1920	OMC	C3'-C2'-O2'-CM2
32	2a	1402	4OC	C3'-C2'-O2'-CM2
32	1a	1402	4OC	C3'-C4'-C5'-O5'
1	2A	2503	2MA	O4'-C4'-C5'-O5'
1	2A	1962	5MC	C2'-C1'-N1-C6
1	1A	1920	OMC	C2'-C1'-N1-C2
1	2A	1962	5MC	O4'-C1'-N1-C6

There are no ring outliers.

No monomer is involved in short contacts.

5.5 Carbohydrates (i)

There are no monosaccharides in this entry.

5.6 Ligand geometry (i)

Of 2525 ligands modelled in this entry, 2510 are monoatomic - leaving 15 for Mogul analysis.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
55	HGR	2A	3730	-	39,39,39	2.43	10 (25%)	50,58,58	1.63	12 (24%)
57	MPD	18	103	-	7,7,7	0.32	0	9,10,10	0.51	0
56	ZIT	1A	4023	-	54,54,54	0.86	2 (3%)	82,83,83	1.33	10 (12%)
60	SF4	2d	501	35	0,12,12	-	-	-		
57	MPD	2A	3733	-	7,7,7	0.29	0	9,10,10	0.33	0
58	ARG	1F	318	54	10,11,11	0.71	0	11,13,13	1.12	2 (18%)
57	MPD	1a	1882	32	7,7,7	0.38	0	9,10,10	0.62	0
60	SF4	1d	305	35	0,12,12	-	-	-		
57	MPD	1A	4024	-	7,7,7	0.34	0	9,10,10	0.39	0
57	MPD	2A	3732	-	7,7,7	0.29	0	9,10,10	0.21	0
57	MPD	2B	217	-	7,7,7	0.31	0	9,10,10	0.27	0
57	MPD	1T	204	-	7,7,7	0.27	0	9,10,10	0.34	0
58	ARG	1B	230	-	10,11,11	0.74	1 (10%)	11,13,13	1.23	2 (18%)
55	HGR	1A	4022	-	39,39,39	2.49	11 (28%)	50,58,58	1.76	14 (28%)
56	ZIT	2A	3731	-	54,54,54	0.86	2 (3%)	82,83,83	1.42	12 (14%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
55	HGR	2A	3730	-	-	8/20/79/79	0/4/4/4
57	MPD	18	103	-	-	2/5/5/5	-
56	ZIT	1A	4023	-	-	5/72/107/107	0/3/3/3
60	SF4	2d	501	35	-	-	0/6/5/5
57	MPD	2A	3733	-	-	3/5/5/5	-
58	ARG	1F	318	54	-	0/11/11/11	-
57	MPD	1a	1882	32	-	2/5/5/5	-

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
60	SF4	1d	305	35	-	-	0/6/5/5
57	MPD	1A	4024	-	-	0/5/5/5	-
57	MPD	2A	3732	-	-	0/5/5/5	-
57	MPD	2B	217	-	-	3/5/5/5	-
57	MPD	1T	204	-	-	4/5/5/5	-
58	ARG	1B	230	-	-	2/11/11/11	-
55	HGR	1A	4022	-	-	6/20/79/79	0/4/4/4
56	ZIT	2A	3731	-	-	8/72/107/107	0/3/3/3

All (26) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
55	1A	4022	HGR	C12-C14	9.31	1.55	1.33
55	2A	3730	HGR	C12-C14	9.06	1.54	1.33
55	2A	3730	HGR	C5-C6	-5.38	1.39	1.50
55	1A	4022	HGR	C5-C6	-5.33	1.39	1.50
55	2A	3730	HGR	C5-C4	-5.25	1.39	1.49
55	1A	4022	HGR	C5-C4	-5.19	1.39	1.49
56	2A	3731	ZIT	O14-C1	4.84	1.45	1.34
55	2A	3730	HGR	C3-C2	-4.75	1.39	1.48
56	1A	4023	ZIT	O14-C1	4.66	1.45	1.34
55	1A	4022	HGR	C3-C2	-4.54	1.39	1.48
55	1A	4022	HGR	O4-C2	4.36	1.36	1.24
55	2A	3730	HGR	O4-C2	4.24	1.35	1.24
55	1A	4022	HGR	C1-C6	2.94	1.39	1.35
55	1A	4022	HGR	O1-C10	2.82	1.46	1.41
55	2A	3730	HGR	C1-C6	2.78	1.39	1.35
55	1A	4022	HGR	O8-C23	2.61	1.45	1.41
55	2A	3730	HGR	O1-C10	2.51	1.46	1.41
55	2A	3730	HGR	O9-C23	2.41	1.45	1.41
55	2A	3730	HGR	O8-C23	2.33	1.45	1.41
56	1A	4023	ZIT	O14-C14	-2.31	1.42	1.46
55	1A	4022	HGR	C8-C7	-2.21	1.50	1.53
56	2A	3731	ZIT	O14-C14	-2.19	1.42	1.46
55	1A	4022	HGR	O9-C23	2.15	1.44	1.41
58	1B	230	ARG	OXT-C	-2.13	1.23	1.30
55	1A	4022	HGR	O1-C7	2.02	1.46	1.43
55	2A	3730	HGR	C17-N1	2.00	1.49	1.45

All (52) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
55	1A	4022	HGR	C4-C5-C6	4.29	121.60	112.36
56	2A	3731	ZIT	O3B-C3B-C4B	4.14	109.94	103.81
55	2A	3730	HGR	C4-C5-C6	4.13	121.25	112.36
55	1A	4022	HGR	C8-C7-C11	-3.99	106.66	113.67
56	2A	3731	ZIT	C6-C5-C4	-3.95	108.46	114.05
56	1A	4023	ZIT	O3B-C3B-C4B	3.89	109.58	103.81
56	1A	4023	ZIT	C6-C5-C4	-3.45	109.17	114.05
55	1A	4022	HGR	C4-C3-C2	-3.42	118.68	121.83
55	2A	3730	HGR	C12-C6-C1	-3.34	116.23	119.31
56	2A	3731	ZIT	O14-C1-C2	3.29	118.77	111.56
56	2A	3731	ZIT	O3B-C3B-C2B	-3.26	107.73	112.96
58	1B	230	ARG	OXT-C-O	-3.16	116.92	124.09
55	2A	3730	HGR	O8-C18-C22	-3.15	98.91	105.97
56	1A	4023	ZIT	C14-O14-C1	-3.07	112.72	118.18
55	2A	3730	HGR	C4-C3-C2	-3.04	119.03	121.83
55	1A	4022	HGR	O9-C22-C18	-2.99	99.27	105.97
55	2A	3730	HGR	O1-C10-C9	-2.98	101.14	104.98
55	2A	3730	HGR	C9-C8-C7	-2.97	98.18	101.64
55	1A	4022	HGR	C12-C6-C1	-2.96	116.58	119.31
56	1A	4023	ZIT	O1A-C5-C6	2.93	110.01	106.39
55	1A	4022	HGR	C23-O9-C22	-2.92	101.86	106.31
55	1A	4022	HGR	O1-C10-C9	-2.92	101.22	104.98
56	1A	4023	ZIT	C8B-O3B-C3B	2.88	123.55	117.55
55	2A	3730	HGR	O3-C10-C9	2.81	111.53	106.78
55	2A	3730	HGR	O4-C2-C3	-2.78	116.95	121.30
58	1F	318	ARG	OXT-C-O	-2.77	117.80	124.09
55	2A	3730	HGR	C10-C9-C8	-2.74	98.82	102.30
55	1A	4022	HGR	O3-C10-C9	2.74	111.40	106.78
56	1A	4023	ZIT	C9-N10-C11	-2.67	107.52	112.05
56	1A	4023	ZIT	O14-C1-C2	2.67	117.41	111.56
56	2A	3731	ZIT	C8B-O3B-C3B	2.63	123.03	117.55
56	1A	4023	ZIT	O14-C1-O1	-2.61	119.06	123.94
55	1A	4022	HGR	C1-C2-C3	2.58	120.96	115.99
55	1A	4022	HGR	O3-C3-C2	2.58	117.46	112.56
55	1A	4022	HGR	O4-C2-C3	-2.57	117.28	121.30
55	1A	4022	HGR	C19-C17-N1	2.56	115.46	110.62
55	2A	3730	HGR	C1-C2-C3	2.50	120.80	115.99
56	2A	3731	ZIT	C14-O14-C1	-2.48	113.77	118.18
56	2A	3731	ZIT	O14-C1-O1	-2.48	119.31	123.94
56	2A	3731	ZIT	O5B-C5B-C4B	2.45	114.41	110.03
58	1B	230	ARG	OXT-C-CA	2.42	121.64	113.38
56	2A	3731	ZIT	C22-C11-C12	-2.41	110.52	113.75
58	1F	318	ARG	OXT-C-CA	2.35	121.40	113.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
55	1A	4022	HGR	C10-C9-C8	-2.32	99.36	102.30
55	2A	3730	HGR	O3-C3-C2	2.31	116.96	112.56
55	2A	3730	HGR	C8-C7-C11	-2.28	109.66	113.67
55	1A	4022	HGR	O8-C18-C22	-2.26	100.92	105.97
56	2A	3731	ZIT	C15-C14-C13	-2.24	110.95	115.20
56	1A	4023	ZIT	O1A-C5-C4	-2.20	108.25	111.54
56	2A	3731	ZIT	C8-C9-N10	-2.16	109.54	113.95
56	2A	3731	ZIT	C3B-C2B-C1B	-2.07	111.48	115.07
56	1A	4023	ZIT	C3B-C2B-C1B	-2.06	111.49	115.07

There are no chirality outliers.

All (43) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
55	1A	4022	HGR	C2-C3-O3-C10
55	2A	3730	HGR	C2-C3-O3-C10
56	1A	4023	ZIT	C12-C11-N10-C9
56	1A	4023	ZIT	C22-C11-N10-C9
56	1A	4023	ZIT	C12-C11-N10-C21
56	1A	4023	ZIT	C22-C11-N10-C21
56	1A	4023	ZIT	C4B-C3B-O3B-C8B
56	2A	3731	ZIT	C7-C8-C9-N10
56	2A	3731	ZIT	C20-C8-C9-N10
56	2A	3731	ZIT	C22-C11-N10-C9
56	2A	3731	ZIT	C22-C11-N10-C21
56	2A	3731	ZIT	C2B-C3B-O3B-C8B
56	2A	3731	ZIT	C4B-C3B-O3B-C8B
56	2A	3731	ZIT	C7B-C3B-O3B-C8B
57	18	103	MPD	C2-C3-C4-O4
57	1a	1882	MPD	C2-C3-C4-O4
57	2A	3733	MPD	C2-C3-C4-O4
58	1B	230	ARG	NE-CD-CG-CB
57	2B	217	MPD	O2-C2-C3-C4
58	1B	230	ARG	CA-CB-CG-CD
57	1a	1882	MPD	C2-C3-C4-C5
57	2B	217	MPD	C2-C3-C4-C5
55	1A	4022	HGR	C12-C14-C15-O7
55	2A	3730	HGR	C12-C14-C15-O7
55	2A	3730	HGR	C12-C14-C15-N1
56	2A	3731	ZIT	C8-C9-N10-C11
57	1T	204	MPD	C1-C2-C3-C4
57	2A	3733	MPD	C1-C2-C3-C4

Continued on next page...

Continued from previous page...

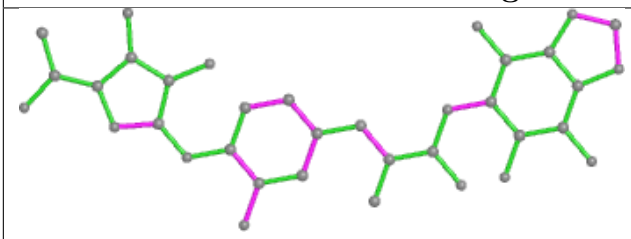
Mol	Chain	Res	Type	Atoms
55	1A	4022	HGR	C16-C14-C15-O7
55	2A	3730	HGR	C16-C14-C15-O7
55	2A	3730	HGR	C16-C14-C15-N1
55	1A	4022	HGR	C12-C14-C15-N1
57	1T	204	MPD	O2-C2-C3-C4
57	18	103	MPD	O2-C2-C3-C4
57	2A	3733	MPD	O2-C2-C3-C4
55	1A	4022	HGR	C16-C14-C15-N1
57	1T	204	MPD	C2-C3-C4-C5
55	2A	3730	HGR	C19-C17-N1-C15
55	1A	4022	HGR	O6-C11-C7-O1
55	2A	3730	HGR	O6-C11-C7-O1
57	1T	204	MPD	C2-C3-C4-O4
57	2B	217	MPD	C2-C3-C4-O4
55	2A	3730	HGR	O1-C10-O3-C3

There are no ring outliers.

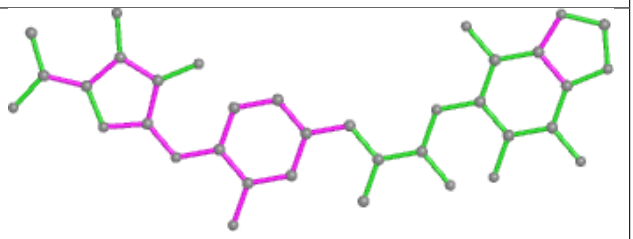
No monomer is involved in short contacts.

The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less then 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.

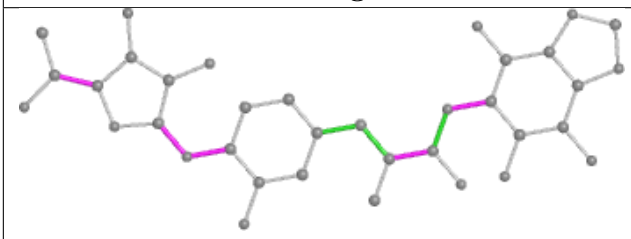
Ligand HGR 2A 3730



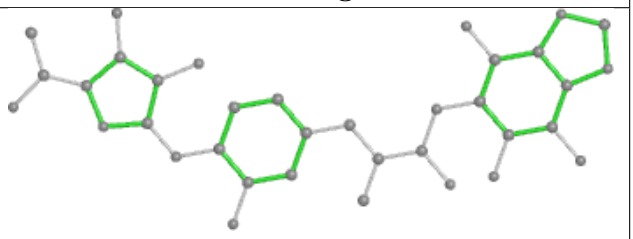
Bond lengths



Bond angles

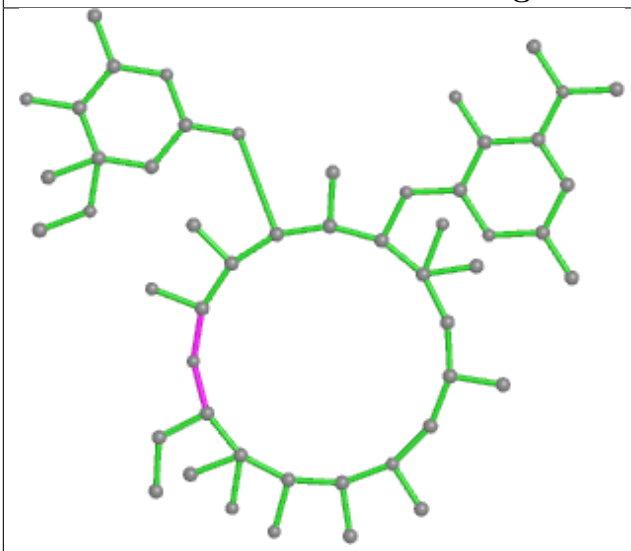


Torsions

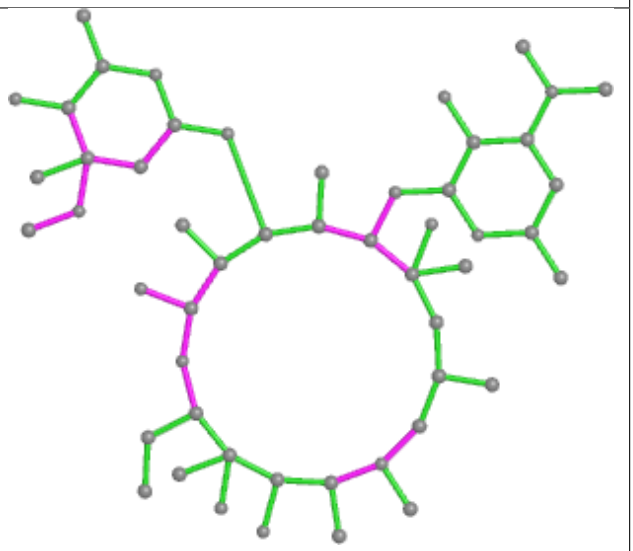


Rings

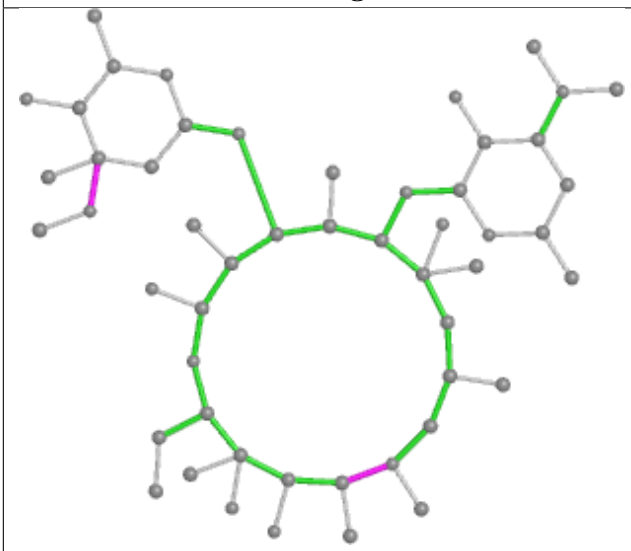
Ligand ZIT 1A 4023



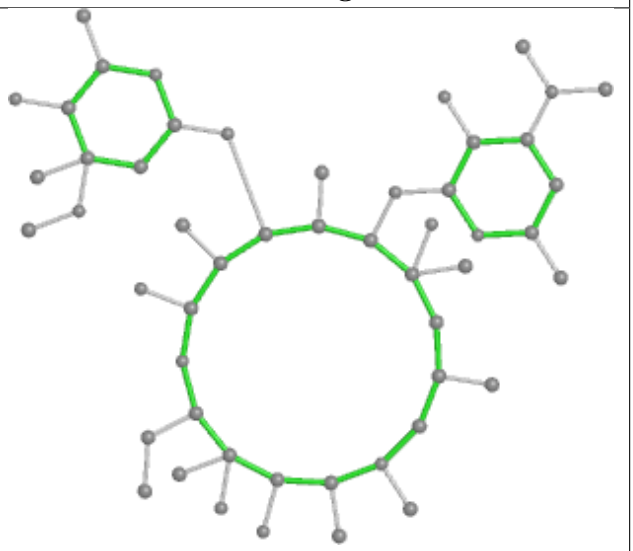
Bond lengths



Bond angles

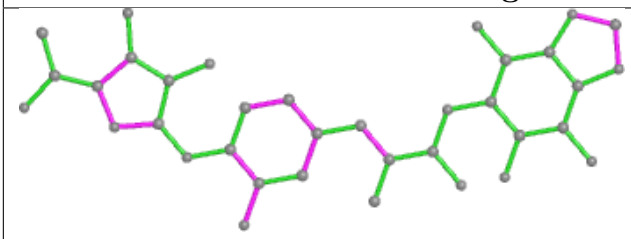


Torsions

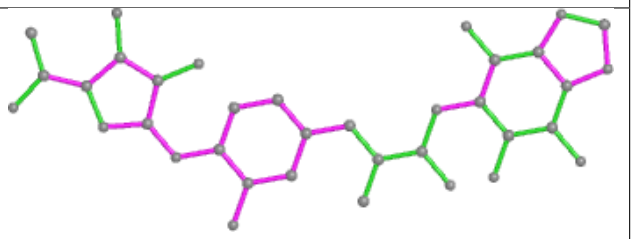


Rings

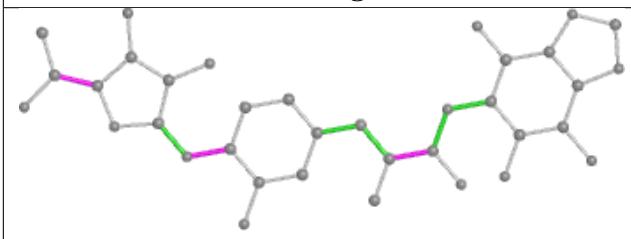
Ligand HGR 1A 4022



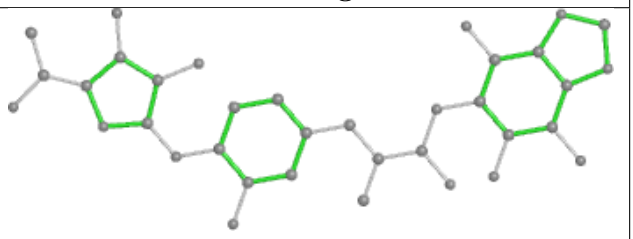
Bond lengths



Bond angles

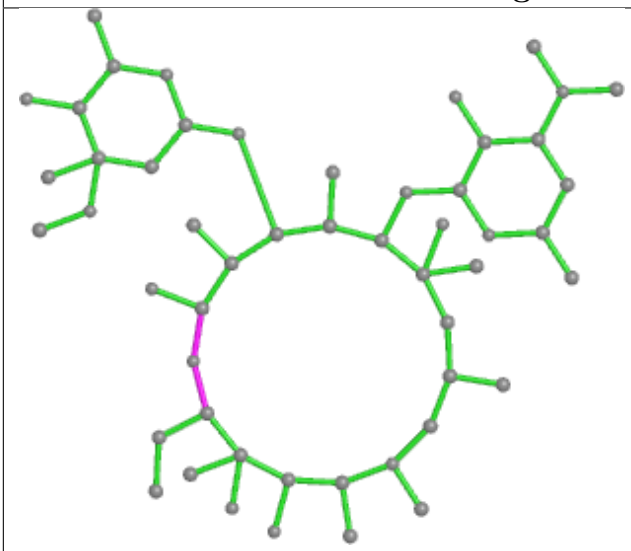


Torsions

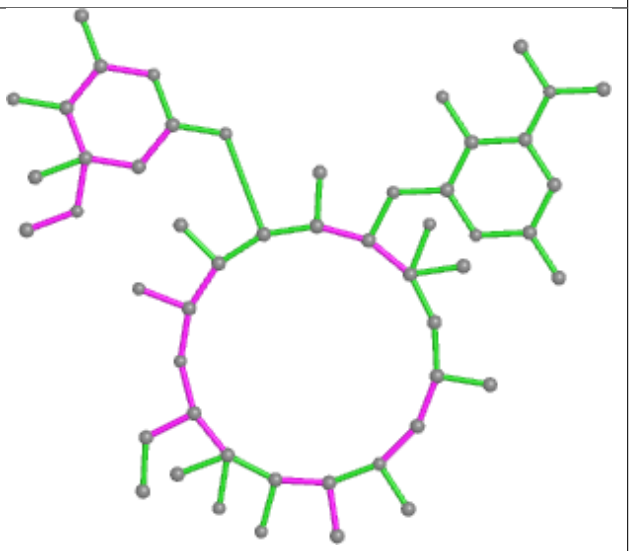


Rings

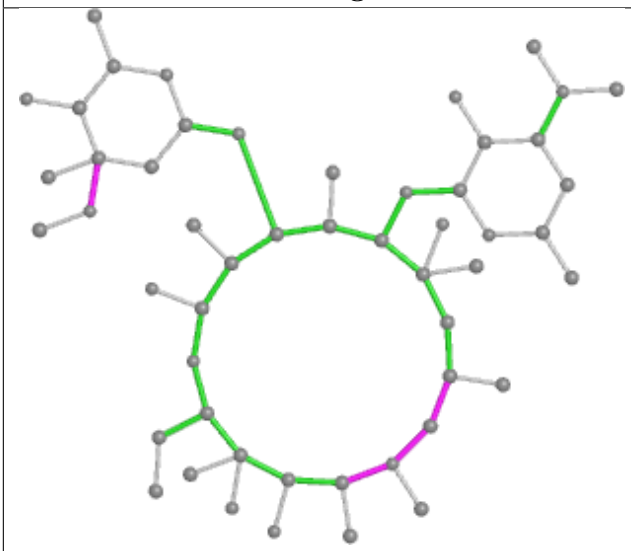
Ligand ZIT 2A 3731



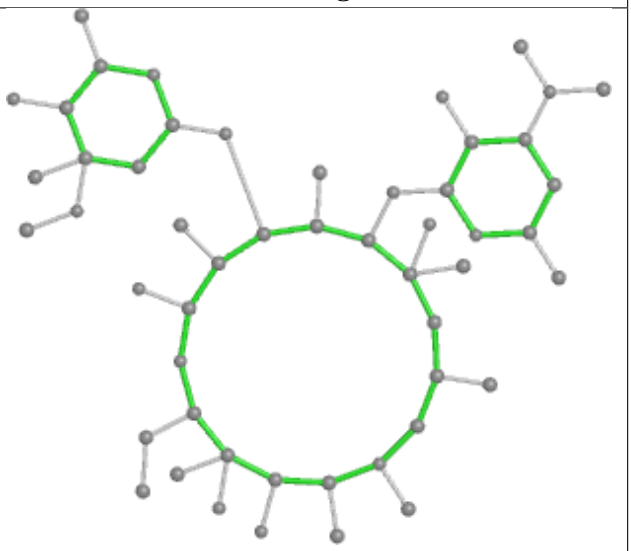
Bond lengths



Bond angles



Torsions



Rings

5.7 Other polymers (i)

There are no such residues in this entry.

5.8 Polymer linkage issues (i)

There are no chain breaks in this entry.

6 Fit of model and data

6.1 Protein, DNA and RNA chains

In the following table, the column labelled '#RSRZ> 2' contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 95^{th} percentile and maximum values of the occupancy-weighted average B-factor per residue. The column labelled 'Q< 0.9' lists the number of (and percentage) of residues with an average occupancy less than 0.9.

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
1	1A	2861/2915 (98%)	0.45	97 (3%) 45 48	26, 41, 95, 108	0
1	2A	2856/2915 (97%)	0.19	114 (3%) 38 41	37, 59, 98, 107	0
2	1B	120/121 (99%)	0.12	0 100 100	36, 54, 69, 84	0
2	2B	120/121 (99%)	-0.30	0 100 100	61, 78, 86, 90	0
3	1D	275/276 (99%)	0.64	5 (1%) 68 71	28, 43, 56, 75	0
3	2D	275/276 (99%)	0.60	10 (3%) 42 46	36, 54, 64, 79	0
4	1E	204/206 (99%)	0.66	2 (0%) 82 84	26, 45, 65, 80	0
4	2E	204/206 (99%)	0.52	4 (1%) 65 68	37, 59, 73, 88	0
5	1F	203/210 (96%)	0.62	0 100 100	25, 46, 71, 86	0
5	2F	203/210 (96%)	0.38	1 (0%) 91 91	36, 67, 80, 87	0
6	1G	181/182 (99%)	0.26	7 (3%) 39 42	52, 67, 81, 86	0
6	2G	181/182 (99%)	0.75	25 (13%) 2 2	74, 82, 89, 93	0
7	1H	174/180 (96%)	0.34	1 (0%) 89 90	41, 56, 69, 74	0
7	2H	173/180 (96%)	1.66	63 (36%) 0 0	70, 81, 89, 92	0
8	1I	147/148 (99%)	0.28	5 (3%) 45 48	48, 73, 82, 87	0
8	2I	146/148 (98%)	0.70	19 (13%) 3 3	60, 75, 85, 90	0
9	1N	140/140 (100%)	0.77	0 100 100	30, 43, 62, 77	0
9	2N	140/140 (100%)	0.46	4 (2%) 51 55	49, 64, 77, 79	0
10	1O	122/122 (100%)	0.47	0 100 100	34, 45, 60, 66	0
10	2O	122/122 (100%)	0.54	3 (2%) 57 61	46, 57, 72, 76	0
11	1P	149/150 (99%)	0.56	2 (1%) 77 79	26, 50, 68, 84	0
11	2P	149/150 (99%)	0.61	6 (4%) 38 41	43, 67, 81, 86	0
12	1Q	141/141 (100%)	0.54	0 100 100	31, 44, 56, 72	0
12	2Q	141/141 (100%)	0.55	6 (4%) 35 38	47, 65, 74, 81	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
13	1R	118/118 (100%)	0.56	1 (0%) 86 87	31, 40, 51, 62	0
13	2R	118/118 (100%)	0.56	1 (0%) 86 87	41, 54, 64, 71	0
14	1S	110/112 (98%)	0.50	1 (0%) 84 86	44, 53, 65, 71	0
14	2S	110/112 (98%)	0.50	9 (8%) 11 11	65, 74, 79, 85	0
15	1T	131/146 (89%)	0.39	3 (2%) 60 63	38, 48, 70, 86	0
15	2T	131/146 (89%)	0.60	8 (6%) 21 22	51, 61, 79, 85	0
16	1U	116/118 (98%)	0.69	0 100 100	27, 36, 49, 63	0
16	2U	116/118 (98%)	0.50	0 100 100	42, 60, 72, 77	0
17	1V	101/101 (100%)	0.67	0 100 100	28, 45, 61, 68	0
17	2V	101/101 (100%)	0.44	0 100 100	42, 70, 78, 83	0
18	1W	112/113 (99%)	0.76	2 (1%) 68 71	29, 37, 57, 81	0
18	2W	112/113 (99%)	0.54	1 (0%) 84 86	40, 51, 69, 87	0
19	1X	95/96 (98%)	0.69	0 100 100	33, 41, 64, 76	0
19	2X	95/96 (98%)	0.43	2 (2%) 63 66	48, 62, 73, 81	0
20	1Y	107/110 (97%)	0.58	0 100 100	40, 52, 65, 74	0
20	2Y	107/110 (97%)	0.50	2 (1%) 66 69	61, 70, 80, 85	0
21	1Z	203/206 (98%)	0.34	1 (0%) 91 91	41, 61, 75, 84	0
21	2Z	201/206 (97%)	0.50	10 (4%) 28 30	67, 78, 86, 89	0
22	10	77/85 (90%)	0.65	1 (1%) 77 79	34, 42, 59, 66	0
22	20	77/85 (90%)	0.96	10 (12%) 3 3	50, 64, 72, 84	0
23	11	97/98 (98%)	0.63	2 (2%) 63 66	34, 48, 69, 74	0
23	21	97/98 (98%)	0.71	8 (8%) 11 11	43, 59, 75, 78	0
24	12	70/72 (97%)	0.56	0 100 100	41, 53, 62, 79	0
24	22	70/72 (97%)	0.38	1 (1%) 75 77	60, 71, 78, 80	0
25	13	59/60 (98%)	0.75	0 100 100	28, 41, 66, 74	0
25	23	59/60 (98%)	0.54	1 (1%) 70 72	53, 62, 74, 84	0
26	14	69/71 (97%)	0.58	10 (14%) 2 2	61, 79, 92, 93	0
26	24	69/71 (97%)	0.53	9 (13%) 3 3	82, 89, 94, 95	0
27	15	59/60 (98%)	0.79	0 100 100	26, 39, 53, 63	0
27	25	59/60 (98%)	0.41	0 100 100	36, 52, 66, 75	0
28	16	53/54 (98%)	0.34	0 100 100	38, 47, 59, 63	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
28	26	53/54 (98%)	0.19	0 100 100	54, 63, 71, 76	0
29	17	48/49 (97%)	0.84	2 (4%) 36 39	27, 34, 58, 67	0
29	27	48/49 (97%)	0.68	3 (6%) 20 21	38, 46, 66, 76	0
30	18	64/65 (98%)	0.68	0 100 100	33, 39, 45, 55	0
30	28	64/65 (98%)	0.95	8 (12%) 3 3	49, 56, 63, 70	0
31	19	37/37 (100%)	0.78	1 (2%) 54 58	36, 46, 60, 64	0
31	29	37/37 (100%)	1.38	11 (29%) 0 0	58, 66, 73, 76	0
32	1a	1488/1521 (97%)	0.05	29 (1%) 66 69	42, 71, 94, 109	0
32	2a	1492/1521 (98%)	0.11	46 (3%) 49 52	51, 78, 96, 107	0
33	1b	231/256 (90%)	0.39	10 (4%) 35 38	68, 80, 89, 95	0
33	2b	231/256 (90%)	0.48	23 (9%) 7 6	75, 85, 91, 95	0
34	1c	206/239 (86%)	0.52	15 (7%) 15 15	61, 74, 84, 90	0
34	2c	206/239 (86%)	1.08	45 (21%) 0 0	78, 84, 89, 91	0
35	1d	208/209 (99%)	0.79	21 (10%) 7 6	58, 72, 81, 89	0
35	2d	208/209 (99%)	0.82	23 (11%) 5 5	64, 74, 80, 83	0
36	1e	148/162 (91%)	0.39	4 (2%) 54 58	57, 68, 76, 86	0
36	2e	148/162 (91%)	0.65	13 (8%) 10 10	63, 74, 82, 87	0
37	1f	100/101 (99%)	0.17	2 (2%) 65 68	59, 69, 78, 84	0
37	2f	100/101 (99%)	0.26	0 100 100	60, 71, 78, 86	0
38	1g	155/156 (99%)	0.40	7 (4%) 33 36	68, 75, 82, 86	0
38	2g	155/156 (99%)	0.45	18 (11%) 4 4	74, 82, 87, 91	0
39	1h	137/138 (99%)	0.47	7 (5%) 28 29	59, 70, 76, 81	0
39	2h	137/138 (99%)	0.76	13 (9%) 8 8	66, 75, 80, 83	0
40	1i	127/128 (99%)	1.06	33 (25%) 0 0	67, 79, 85, 87	0
40	2i	126/128 (98%)	2.69	80 (63%) 0 0	78, 86, 90, 93	0
41	1j	97/105 (92%)	0.78	11 (11%) 5 4	62, 79, 89, 91	0
41	2j	96/105 (91%)	1.97	40 (41%) 0 0	77, 86, 91, 94	0
42	1k	114/129 (88%)	0.26	2 (1%) 68 71	50, 68, 77, 85	0
42	2k	114/129 (88%)	0.61	11 (9%) 8 7	61, 75, 82, 86	0
43	1l	121/132 (91%)	0.58	8 (6%) 18 19	54, 62, 72, 75	0
43	2l	121/132 (91%)	1.14	21 (17%) 1 1	61, 69, 76, 83	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
44	1m	116/126 (92%)	0.76	14 (12%) 4 4	62, 77, 82, 86	0
44	2m	114/126 (90%)	1.13	30 (26%) 0 0	77, 84, 89, 92	0
45	1n	60/61 (98%)	1.58	17 (28%) 0 0	65, 72, 79, 82	0
45	2n	60/61 (98%)	3.19	43 (71%) 0 0	77, 84, 89, 94	0
46	1o	88/89 (98%)	0.49	1 (1%) 80 82	53, 67, 78, 83	0
46	2o	88/89 (98%)	0.49	2 (2%) 60 63	62, 73, 81, 87	0
47	1p	82/88 (93%)	1.35	21 (25%) 0 0	62, 73, 82, 85	0
47	2p	82/88 (93%)	1.10	12 (14%) 2 2	64, 72, 80, 85	0
48	1q	99/105 (94%)	1.12	19 (19%) 1 1	59, 71, 78, 81	0
48	2q	99/105 (94%)	0.91	14 (14%) 2 2	59, 72, 79, 85	0
49	1r	68/88 (77%)	0.63	7 (10%) 6 6	61, 68, 80, 88	0
49	2r	68/88 (77%)	0.45	0 100 100	65, 75, 83, 86	0
50	1s	83/93 (89%)	1.05	15 (18%) 1 1	70, 77, 83, 87	0
50	2s	83/93 (89%)	1.55	31 (37%) 0 0	79, 87, 91, 92	0
51	1t	96/106 (90%)	1.59	34 (35%) 0 0	64, 72, 80, 84	0
51	2t	98/106 (92%)	1.23	22 (22%) 0 0	60, 71, 81, 85	0
52	1u	23/27 (85%)	2.05	10 (43%) 0 0	71, 76, 78, 82	0
52	2u	23/27 (85%)	2.72	12 (52%) 0 0	79, 82, 85, 89	0
53	1y	97/113 (85%)	0.80	9 (9%) 8 8	59, 68, 77, 81	0
53	2y	96/113 (84%)	2.59	54 (56%) 0 0	73, 82, 89, 91	0
All	All	20766/21468 (96%)	0.51	1331 (6%) 19 20	25, 66, 89, 109	0

All (1331) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	1A	1087	G	12.7
1	1A	1091	G	11.4
1	1A	1090	U	11.0
1	1A	1089	G	10.9
45	2n	2	ALA	9.0
1	1A	1076	C	8.9
32	2a	1030(B)	C	8.6
32	2a	1030(A)	G	8.6
33	2b	122	PHE	8.4
1	1A	1075	C	8.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	1A	1077	A	8.1
1	1A	1064	C	7.9
23	11	2	SER	7.7
26	24	49	PHE	7.6
45	2n	12	ARG	7.5
44	2m	102	ARG	7.4
1	1A	1074	G	7.3
40	2i	8	GLY	7.1
45	2n	34	TYR	7.1
1	2A	2124	G	7.1
45	2n	61	TRP	6.9
40	2i	109	VAL	6.9
1	2A	2602	A	6.9
41	2j	67	THR	6.8
1	1A	1067	A	6.8
53	2y	40	ILE	6.8
1	1A	1088	A	6.8
1	1A	1080	C	6.8
1	1A	1066	U	6.7
40	2i	126	SER	6.6
52	2u	14	TRP	6.5
52	2u	2	GLY	6.5
1	2A	2146	C	6.5
1	1A	1078	U	6.5
1	1A	888	C	6.4
1	1A	1103	A	6.3
53	2y	9	GLN	6.3
53	2y	42	SER	6.3
40	2i	72	GLY	6.2
1	1A	1072	C	6.1
1	2A	2174	C	6.1
53	2y	38	HIS	6.1
1	2A	2125	G	6.1
41	2j	72	VAL	6.1
35	1d	167	GLY	6.1
1	1A	1102	C	6.1
7	2H	165	ALA	6.1
1	2A	2139	C	6.0
53	2y	49	VAL	6.0
1	1A	1092	C	6.0
1	1A	1065	U	6.0
35	1d	2	GLY	5.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	1A	1093	G	5.9
48	1q	99	SER	5.8
39	2h	2	LEU	5.8
40	2i	66	ARG	5.8
26	14	59	PHE	5.8
1	2A	2169	A	5.8
41	2j	44	VAL	5.7
1	2A	2153	G	5.7
1	1A	1086	A	5.7
45	2n	38	GLY	5.7
1	2A	2147	G	5.6
53	2y	48	PHE	5.6
1	1A	1071	G	5.6
1	2A	1046	A	5.6
1	1A	1081	U	5.6
45	2n	35	ARG	5.6
41	2j	34	VAL	5.6
1	1A	1079	C	5.6
1	2A	2173	A	5.5
53	2y	58	ASN	5.5
32	1a	1030(B)	C	5.5
6	2G	152	LEU	5.5
53	2y	88	LEU	5.5
43	2l	18	VAL	5.4
53	2y	63	ALA	5.4
53	2y	77	LEU	5.4
53	2y	41	LEU	5.4
53	1y	94	ALA	5.4
53	2y	50	ALA	5.4
22	20	76	GLY	5.4
40	2i	18	PHE	5.4
53	2y	12	ILE	5.4
7	2H	115	VAL	5.3
1	2A	2168	G	5.3
41	2j	6	ILE	5.3
53	2y	78	ILE	5.3
47	1p	17	TYR	5.2
35	1d	70	ILE	5.2
7	2H	95	ARG	5.2
21	2Z	191	VAL	5.2
31	29	16	VAL	5.2
1	2A	2793	G	5.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
45	2n	44	LEU	5.2
34	1c	193	TYR	5.2
45	2n	55	GLY	5.2
40	2i	10	ARG	5.2
1	2A	1076	C	5.2
34	2c	159	GLY	5.1
3	1D	276	LYS	5.1
40	1i	125	TYR	5.1
8	2I	35	LEU	5.1
1	1A	2141	G	5.1
32	2a	1001(A)	G	5.1
45	2n	13	THR	5.1
34	2c	157	ILE	5.1
40	2i	115	GLY	5.1
1	2A	2162	G	5.1
32	2a	1036	G	5.1
1	2A	2106	G	5.0
48	1q	27	PHE	5.0
32	2a	1030	C	5.0
32	1a	1001	A	5.0
40	2i	127	LYS	5.0
45	2n	29	ARG	5.0
53	2y	10	MET	5.0
1	1A	1063	G	5.0
1	1A	2793	G	4.9
23	21	2	SER	4.9
40	2i	108	VAL	4.9
1	2A	2805	G	4.9
1	2A	888	C	4.9
40	2i	7	THR	4.9
40	2i	75	ASP	4.9
1	1A	2132	U	4.9
32	2a	1033	G	4.9
6	2G	39	ILE	4.9
1	2A	1064	C	4.9
1	1A	2117	A	4.9
45	1n	33	VAL	4.8
34	2c	124	ILE	4.8
33	2b	118	LEU	4.8
1	2A	2145	C	4.8
40	2i	102	LEU	4.8
50	2s	34	TRP	4.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	2A	1085	A	4.8
44	2m	87	TYR	4.8
41	2j	62	HIS	4.8
48	1q	98	LEU	4.8
1	2A	2175	C	4.8
45	2n	6	LEU	4.8
1	1A	2147	G	4.8
53	2y	7	SER	4.8
1	1A	2161	C	4.8
53	2y	8	LYS	4.8
52	2u	6	ARG	4.7
40	2i	56	LEU	4.7
34	2c	152	ILE	4.7
45	2n	15	LYS	4.7
1	2A	2126	A	4.7
41	2j	47	PHE	4.7
34	2c	8	ILE	4.7
52	1u	2	GLY	4.7
1	2A	2132	U	4.7
32	1a	1001(A)	G	4.7
43	1l	64	TYR	4.7
7	2H	105	LEU	4.7
52	1u	13	ILE	4.7
45	2n	16	PHE	4.6
52	1u	14	TRP	4.6
1	1A	1082	U	4.6
38	2g	154	TYR	4.6
7	2H	101	ARG	4.6
1	2A	2123	G	4.6
1	2A	229	A	4.6
41	2j	27	ALA	4.6
1	2A	2154	G	4.6
1	2A	2802	G	4.6
34	2c	177	THR	4.6
32	1a	1286	A	4.6
40	1i	106	ALA	4.6
32	2a	1001	A	4.6
12	2Q	104	PHE	4.6
1	2A	2140	C	4.6
40	2i	114	TYR	4.6
53	2y	64	SER	4.5
51	1t	72	LEU	4.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	2A	1075	C	4.5
34	2c	160	ALA	4.5
1	1A	2116	G	4.5
52	2u	13	ILE	4.5
1	1A	1083	U	4.5
1	1A	2115	G	4.5
40	2i	111	ARG	4.5
21	2Z	192	ALA	4.5
53	2y	52	ALA	4.5
32	2a	1030(C)	G	4.5
51	1t	18	GLN	4.4
53	2y	74	ILE	4.4
32	2a	1031	G	4.4
35	2d	70	ILE	4.4
40	2i	36	TYR	4.4
7	2H	76	VAL	4.4
26	14	56	VAL	4.4
1	1A	1085	A	4.4
1	2A	2142	C	4.4
45	2n	31	ARG	4.4
40	2i	88	TYR	4.4
1	1A	2155	G	4.4
1	2A	2131	G	4.4
35	2d	158	ILE	4.4
45	1n	18	VAL	4.4
45	1n	61	TRP	4.3
50	2s	10	PHE	4.3
32	1a	1257	U	4.3
32	2a	1257	U	4.3
40	1i	114	TYR	4.3
40	2i	26	VAL	4.3
1	2A	2176	A	4.3
42	2k	13	GLN	4.3
47	1p	19	ILE	4.3
1	2A	1083	U	4.3
50	2s	52	TYR	4.3
40	2i	76	ALA	4.3
35	1d	3	ARG	4.3
40	2i	65	VAL	4.3
53	2y	4	ASN	4.3
1	2A	2107	C	4.3
51	1t	13	LEU	4.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
40	2i	33	PHE	4.3
53	2y	73	ALA	4.3
1	2A	2804	C	4.2
40	2i	113	LYS	4.2
44	1m	87	TYR	4.2
26	14	49	PHE	4.2
51	1t	76	ALA	4.2
34	2c	4	LYS	4.2
1	2A	2119	A	4.2
1	2A	2138	C	4.2
41	2j	65	LEU	4.2
20	2Y	1	MET	4.2
29	27	48	LYS	4.2
40	2i	29	ASN	4.2
1	2A	2803	C	4.2
36	2e	12	LEU	4.2
53	2y	71	TYR	4.2
7	2H	97	ARG	4.2
7	2H	82	GLY	4.2
44	1m	2	ALA	4.2
1	1A	2602	A	4.2
32	2a	1030(D)	A	4.2
40	2i	69	GLY	4.2
1	1A	2805	G	4.2
50	2s	71	LEU	4.2
50	2s	53	ASN	4.2
40	2i	62	TYR	4.2
53	2y	51	ASP	4.1
21	2Z	51	ALA	4.1
1	2A	2801(A)	A	4.1
47	2p	19	ILE	4.1
39	2h	112	LEU	4.1
40	2i	24	GLY	4.1
48	2q	10	VAL	4.1
41	2j	63	PHE	4.1
36	2e	13	ILE	4.1
1	1A	2114	A	4.1
50	1s	15	LEU	4.1
34	2c	155	GLY	4.1
41	2j	96	ILE	4.0
40	2i	123	PRO	4.0
51	1t	20	LEU	4.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	1A	2794	C	4.0
51	2t	9	ASN	4.0
19	2X	68	ARG	4.0
40	2i	105	ASP	4.0
52	2u	15	ARG	4.0
53	1y	95	ARG	4.0
45	2n	18	VAL	4.0
1	1A	2145	C	4.0
1	2A	2155	G	4.0
32	2a	1034	G	4.0
47	1p	49	LEU	4.0
1	2A	2894	G	4.0
40	1i	46	ALA	4.0
8	2I	3	VAL	4.0
1	1A	1057	A	3.9
1	2A	2141	G	3.9
32	1a	1002	G	3.9
40	2i	42	ARG	3.9
44	2m	93	ARG	3.9
1	2A	2118	U	3.9
41	1j	49	VAL	3.9
6	2G	3	LEU	3.9
34	2c	196	LEU	3.9
45	2n	37	PHE	3.9
1	2A	2896	C	3.9
26	24	50	VAL	3.9
40	2i	4	TYR	3.9
34	2c	163	ALA	3.9
45	1n	2	ALA	3.9
33	2b	131	PRO	3.9
50	1s	60	VAL	3.9
1	2A	2152	G	3.9
51	1t	70	SER	3.9
8	2I	18	VAL	3.9
41	1j	44	VAL	3.9
41	2j	68	HIS	3.9
45	2n	60	SER	3.9
40	1i	128	ARG	3.9
40	2i	14	VAL	3.9
51	2t	10	LEU	3.9
40	2i	73	GLN	3.9
45	1n	30	ALA	3.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
32	1a	1031	G	3.8
51	1t	9	ASN	3.8
33	1b	214	ILE	3.8
45	2n	7	ILE	3.8
40	2i	9	ARG	3.8
6	2G	135	LEU	3.8
42	2k	25	TYR	3.8
38	1g	156	TRP	3.8
8	2I	92	VAL	3.8
1	2A	2127	G	3.8
41	2j	16	LEU	3.8
41	2j	48	THR	3.8
40	1i	126	SER	3.8
40	2i	110	GLU	3.8
35	2d	49	ARG	3.8
38	2g	80	VAL	3.8
32	2a	1202	G	3.8
40	2i	63	ILE	3.8
45	2n	25	VAL	3.8
50	2s	80	TYR	3.8
51	1t	67	ALA	3.8
1	1A	2140	C	3.8
50	2s	51	VAL	3.8
21	1Z	192	ALA	3.7
38	2g	32	ARG	3.7
41	2j	32	ALA	3.7
52	2u	16	GLY	3.7
32	2a	1029	C	3.7
40	1i	79	LEU	3.7
40	1i	113	LYS	3.7
52	2u	5	ASP	3.7
1	2A	2170	A	3.7
10	2O	51	ALA	3.7
26	24	45	GLY	3.7
35	1d	157	LEU	3.7
1	2A	2792	G	3.7
33	1b	131	PRO	3.7
32	2a	994	A	3.7
53	2y	70	MET	3.7
35	1d	5	ILE	3.7
7	2H	167	GLU	3.7
1	2A	2159	G	3.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
40	2i	79	LEU	3.7
41	2j	40	LEU	3.7
33	2b	133	LYS	3.7
44	1m	115	LYS	3.7
1	2A	2179	C	3.7
44	2m	75	ALA	3.7
45	2n	3	ARG	3.7
53	2y	65	GLY	3.7
43	2l	32	PHE	3.6
50	2s	82	GLY	3.6
40	2i	90	PRO	3.6
1	2A	2110	G	3.6
53	2y	39	ILE	3.6
40	2i	47	LEU	3.6
1	1A	2146	C	3.6
1	1A	2804	C	3.6
1	2A	1079	C	3.6
34	2c	81	GLY	3.6
43	2l	64	TYR	3.6
6	2G	136	ARG	3.6
47	2p	9	PHE	3.6
1	1A	2137	C	3.6
51	2t	11	SER	3.6
7	2H	130	ARG	3.6
6	2G	75	LYS	3.6
51	2t	55	ILE	3.6
51	1t	73	HIS	3.6
23	11	98	LEU	3.6
40	2i	103	THR	3.6
7	2H	113	VAL	3.6
34	1c	10	PHE	3.6
40	1i	120	ARG	3.6
7	2H	103	LEU	3.6
33	1b	228	GLY	3.6
50	2s	49	ILE	3.5
53	2y	5	ILE	3.5
1	2A	2130	U	3.5
32	1a	1492	A	3.5
8	2I	20	ASP	3.5
39	1h	93	VAL	3.5
45	2n	23	ARG	3.5
40	2i	71	SER	3.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
44	2m	84	ILE	3.5
34	2c	199	LYS	3.5
1	2A	2143	C	3.5
1	2A	2160	G	3.5
45	2n	53	LEU	3.5
32	1a	1030	C	3.5
45	1n	25	VAL	3.5
6	2G	87	PRO	3.5
34	2c	206	GLU	3.5
40	2i	119	ALA	3.5
1	2A	2144	U	3.5
1	1A	2159	G	3.5
32	1a	1036	G	3.5
6	2G	51	ARG	3.5
1	2A	2108	C	3.5
42	2k	117	ASN	3.5
40	2i	37	PHE	3.5
40	2i	74	ILE	3.5
48	1q	36	ILE	3.5
47	1p	48	TRP	3.5
52	2u	10	ARG	3.5
1	1A	2154	G	3.5
53	2y	45	PRO	3.5
7	2H	166	GLY	3.5
53	2y	91	LYS	3.5
1	2A	6	A	3.4
1	2A	2137	C	3.4
35	2d	11	LEU	3.4
51	1t	23	ARG	3.4
53	2y	67	HIS	3.4
47	2p	48	TRP	3.4
34	2c	194	GLY	3.4
30	28	49	VAL	3.4
41	2j	74	ILE	3.4
51	1t	17	ARG	3.4
52	2u	17	THR	3.4
7	2H	159	GLU	3.4
34	2c	153	VAL	3.4
40	2i	5	TYR	3.4
32	2a	1041	A	3.4
7	2H	45	VAL	3.4
48	2q	65	ILE	3.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
44	1m	90	LEU	3.4
45	2n	8	GLU	3.4
47	1p	38	TYR	3.4
7	2H	41	MET	3.4
51	1t	74	LYS	3.4
41	1j	50	ILE	3.4
41	2j	38	ILE	3.4
51	1t	22	ARG	3.4
1	2A	2167	U	3.4
1	2A	2172	U	3.4
40	2i	50	LEU	3.4
51	2t	84	LEU	3.4
1	1A	2139	C	3.4
1	1A	2153	G	3.4
40	1i	116	LYS	3.4
51	1t	69	GLY	3.3
33	2b	97	TRP	3.3
47	1p	1	MET	3.3
34	2c	190	ARG	3.3
43	2l	19	ARG	3.3
32	2a	1035	A	3.3
33	2b	201	ILE	3.3
40	2i	81	ILE	3.3
34	2c	23	TYR	3.3
12	2Q	59	ARG	3.3
12	2Q	65	PHE	3.3
40	1i	111	ARG	3.3
51	1t	59	ALA	3.3
50	1s	66	MET	3.3
1	1A	2142	C	3.3
22	20	74	ARG	3.3
41	2j	45	ARG	3.3
52	1u	9	ARG	3.3
1	1A	2167	U	3.3
15	2T	105	LEU	3.3
1	2A	2163	C	3.3
45	1n	34	TYR	3.3
1	2A	2116	G	3.3
26	14	57	GLU	3.3
32	2a	1026	G	3.3
32	2a	1032	G	3.3
7	2H	114	VAL	3.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
26	14	50	VAL	3.3
51	1t	53	LEU	3.3
45	2n	49	HIS	3.3
43	2l	29	GLY	3.3
40	2i	124	GLN	3.3
7	2H	129	THR	3.2
34	2c	197	GLY	3.2
35	2d	149	ALA	3.2
38	2g	34	GLY	3.2
1	2A	1095	A	3.2
7	2H	107	VAL	3.2
36	2e	16	THR	3.2
44	2m	89	GLY	3.2
44	2m	116	THR	3.2
35	2d	146	ILE	3.2
51	1t	55	ILE	3.2
53	2y	84	GLN	3.2
7	2H	83	TYR	3.2
42	1k	25	TYR	3.2
38	2g	6	ARG	3.2
43	2l	99	HIS	3.2
51	1t	16	HIS	3.2
8	2I	38	LEU	3.2
39	2h	134	ILE	3.2
44	2m	106	ASN	3.2
6	1G	146	TYR	3.2
4	1E	195	LEU	3.2
39	1h	133	LEU	3.2
45	2n	24	CYS	3.2
45	2n	59	ALA	3.2
1	1A	2144	U	3.2
22	20	45	PHE	3.2
45	2n	42	ILE	3.2
44	2m	6	GLY	3.2
33	1b	165	VAL	3.2
1	2A	2161	C	3.2
44	2m	96	LEU	3.2
22	20	77	ARG	3.2
29	17	1	MET	3.2
39	2h	93	VAL	3.2
8	1I	38	LEU	3.1
40	1i	47	LEU	3.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
48	1q	23	VAL	3.1
50	2s	79	THR	3.1
32	1a	1446	U	3.1
40	1i	115	GLY	3.1
7	2H	24	VAL	3.1
34	1c	189	ALA	3.1
35	1d	138	TYR	3.1
1	1A	889	C	3.1
41	2j	64	GLU	3.1
40	1i	11	LYS	3.1
6	2G	73	ALA	3.1
50	2s	60	VAL	3.1
34	1c	159	GLY	3.1
7	2H	92	ILE	3.1
41	2j	41	PRO	3.1
3	1D	275	LYS	3.1
40	1i	118	LYS	3.1
14	2S	3	ARG	3.1
52	1u	22	ARG	3.1
40	2i	6	GLY	3.1
43	2l	14	GLY	3.1
44	1m	74	VAL	3.1
48	2q	23	VAL	3.1
6	2G	155	MET	3.1
50	2s	66	MET	3.1
40	2i	40	LEU	3.1
51	2t	59	ALA	3.1
53	2y	79	ASN	3.1
1	1A	1104	C	3.1
1	2A	2164	C	3.1
43	2l	28	LYS	3.1
7	2H	37	VAL	3.1
32	1a	1035	A	3.0
45	2n	33	VAL	3.1
1	2A	2165	G	3.0
7	2H	88	LEU	3.0
21	2Z	187	ALA	3.0
38	2g	16	LEU	3.0
50	1s	77	THR	3.0
52	2u	9	ARG	3.0
32	1a	162	A	3.0
1	1A	1026	U	3.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	2A	2109	U	3.0
8	2I	4	ILE	3.0
43	2l	7	ILE	3.0
1	2A	2121	G	3.0
6	2G	43	LEU	3.0
7	2H	106	THR	3.0
38	2g	117	ALA	3.0
51	1t	36	LEU	3.0
51	2t	72	LEU	3.0
23	21	26	ARG	3.0
1	2A	1509	C	3.0
40	2i	17	VAL	3.0
48	1q	35	VAL	3.0
26	14	45	GLY	3.0
53	1y	92	GLY	3.0
1	2A	2120	G	3.0
40	1i	112	LYS	3.0
50	2s	35	SER	3.0
53	2y	80	LYS	3.0
45	2n	10	ALA	3.0
47	1p	6	LEU	3.0
1	1A	1053	C	3.0
7	2H	9	ILE	3.0
41	2j	36	GLY	3.0
40	2i	121	ARG	3.0
41	2j	66	ARG	3.0
51	1t	79	ARG	3.0
52	2u	12	LYS	3.0
21	2Z	188	ALA	3.0
44	1m	56	LEU	3.0
33	2b	37	ASN	3.0
40	2i	67	GLY	3.0
1	1A	2138	C	3.0
53	2y	87	LYS	3.0
34	2c	164	ARG	3.0
43	1l	89	ARG	3.0
45	2n	41	ARG	3.0
48	2q	71	PHE	3.0
52	1u	21	TYR	3.0
7	2H	145	ALA	3.0
40	2i	85	LEU	3.0
45	1n	10	ALA	3.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
51	2t	6	PRO	3.0
35	1d	50	ARG	3.0
1	2A	2148	G	3.0
1	2A	1090	U	3.0
41	1j	46	ARG	3.0
7	2H	26	VAL	2.9
1	2A	614(A)	U	2.9
32	1a	1029	C	2.9
33	2b	132	LYS	2.9
50	2s	38	SER	2.9
34	2c	188	LEU	2.9
39	1h	2	LEU	2.9
40	2i	19	LEU	2.9
40	2i	92	TYR	2.9
40	2i	106	ALA	2.9
40	2i	57	GLY	2.9
50	2s	62	ILE	2.9
1	2A	1104	C	2.9
32	2a	1028	C	2.9
7	2H	36	PRO	2.9
7	2H	102	ALA	2.9
22	20	75	LEU	2.9
34	2c	149	ALA	2.9
50	2s	11	VAL	2.9
49	1r	29	PHE	2.9
3	2D	2	ALA	2.9
7	2H	30	LYS	2.9
38	1g	16	LEU	2.9
53	2y	15	ALA	2.9
1	2A	1067	A	2.9
50	1s	56	GLN	2.9
41	2j	54	PHE	2.9
34	2c	101	LEU	2.9
50	1s	71	LEU	2.9
7	2H	116	GLU	2.9
53	2y	62	VAL	2.9
1	1A	2166	G	2.9
43	2l	13	LYS	2.9
45	2n	11	LYS	2.9
4	2E	115	GLY	2.9
32	1a	1000	U	2.9
40	2i	59	PHE	2.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
44	2m	24	GLY	2.9
45	1n	16	PHE	2.9
7	2H	23	ARG	2.9
33	2b	137	ARG	2.9
40	2i	122	ALA	2.9
50	2s	30	LEU	2.9
50	2s	75	ALA	2.9
34	2c	207	VAL	2.9
7	2H	16	SER	2.9
8	2I	79	ILE	2.9
1	2A	2135	A	2.9
32	2a	1286	A	2.9
34	2c	167	TRP	2.9
33	2b	121	LEU	2.9
53	2y	46	GLN	2.9
7	2H	49	VAL	2.8
7	2H	99	VAL	2.8
40	2i	91	ASP	2.8
7	2H	72	ILE	2.8
7	2H	123	PHE	2.8
53	2y	43	LYS	2.8
1	1A	229	A	2.8
6	2G	62	LEU	2.8
49	1r	26	LEU	2.8
36	1e	22	GLY	2.8
41	1j	60	ARG	2.8
44	2m	110	ARG	2.8
53	2y	92	GLY	2.8
6	2G	140	ILE	2.8
14	2S	12	PHE	2.8
50	1s	74	PHE	2.8
34	2c	65	ALA	2.8
11	2P	59	LEU	2.8
1	2A	2133	G	2.8
44	2m	111	LYS	2.8
48	1q	97	SER	2.8
45	2n	21	TYR	2.8
47	2p	39	TYR	2.8
1	1A	2803	C	2.8
26	14	53	GLU	2.8
36	2e	26	PHE	2.8
36	2e	89	ILE	2.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
37	1f	97	PHE	2.8
3	1D	37	LEU	2.8
8	2I	75	LEU	2.8
34	1c	2	GLY	2.8
22	20	51	VAL	2.8
32	2a	1002	G	2.8
33	2b	165	VAL	2.8
34	2c	66	VAL	2.8
44	2m	23	TYR	2.8
7	2H	35	VAL	2.8
30	28	21	LYS	2.8
32	1a	1447	A	2.8
32	2a	949	A	2.8
26	24	63	TYR	2.8
1	2A	1056	G	2.8
26	24	51	ASP	2.8
35	1d	73	ARG	2.8
50	2s	69	HIS	2.8
48	2q	36	ILE	2.8
1	2A	2129	C	2.8
3	2D	37	LEU	2.8
6	1G	82	LEU	2.8
34	2c	33	LEU	2.8
34	2c	87	LEU	2.8
50	1s	30	LEU	2.8
51	2t	20	LEU	2.8
38	2g	31	MET	2.8
1	1A	2173	A	2.8
1	2A	1103	A	2.8
52	1u	17	THR	2.8
8	2I	2	LYS	2.8
42	2k	123	LYS	2.8
40	2i	104	ARG	2.8
40	2i	120	ARG	2.8
49	1r	42	ARG	2.8
45	1n	14	PRO	2.8
11	2P	83	VAL	2.7
1	2A	1026	U	2.7
1	2A	2171	A	2.7
3	2D	38	LYS	2.7
7	2H	22	GLY	2.7
31	29	24	TYR	2.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
31	29	37	GLY	2.7
7	1H	2	SER	2.7
38	1g	32	ARG	2.7
1	1A	1068	G	2.7
53	2y	11	GLU	2.7
10	2O	69	ILE	2.7
13	2R	68	ARG	2.7
23	21	63	ALA	2.7
43	2l	100	ILE	2.7
46	1o	88	ARG	2.7
50	1s	52	TYR	2.7
47	2p	59	TRP	2.7
50	2s	74	PHE	2.7
1	1A	1084	A	2.7
41	2j	71	LEU	2.7
1	1A	2148	G	2.7
1	2A	1099	G	2.7
32	1a	1028	C	2.7
32	2a	1321	C	2.7
12	2Q	121	ALA	2.7
14	2S	92	TYR	2.7
44	2m	64	TRP	2.7
1	1A	2143	C	2.7
15	2T	108	ARG	2.7
47	2p	62	VAL	2.7
30	28	24	ALA	2.7
43	2l	56	ALA	2.7
45	2n	4	LYS	2.7
49	1r	73	ALA	2.7
40	1i	117	HIS	2.7
42	2k	126	ARG	2.7
52	2u	22	ARG	2.7
45	1n	15	LYS	2.7
53	1y	91	LYS	2.7
40	1i	28	VAL	2.7
7	2H	121	ILE	2.7
45	2n	39	LEU	2.7
6	2G	146	TYR	2.7
43	2l	15	ARG	2.7
1	1A	2119	A	2.7
12	2Q	114	ALA	2.7
26	24	44	THR	2.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
35	1d	111	ALA	2.7
40	1i	110	GLU	2.7
41	2j	19	SER	2.7
44	2m	5	ALA	2.7
7	2H	71	LEU	2.7
34	1c	39	ILE	2.7
45	2n	45	ARG	2.7
32	1a	1030(C)	G	2.7
32	1a	1034	G	2.7
32	2a	998	G	2.7
35	2d	2	GLY	2.7
45	2n	58	LYS	2.6
33	1b	122	PHE	2.6
51	1t	45	GLN	2.6
51	2t	42	GLN	2.6
1	1A	2149	G	2.6
48	1q	38	ARG	2.6
33	2b	164	VAL	2.6
35	2d	64	LEU	2.6
39	2h	86	ILE	2.6
50	2s	54	GLY	2.6
1	2A	2157	G	2.6
26	24	56	VAL	2.6
1	2A	1086	A	2.6
6	2G	133	LEU	2.6
6	2G	157	ILE	2.6
7	2H	128	PRO	2.6
35	2d	166	LYS	2.6
1	1A	2129	C	2.6
1	2A	2111	C	2.6
51	2t	56	MET	2.6
8	1I	3	VAL	2.6
31	29	25	VAL	2.6
40	2i	41	VAL	2.6
40	2i	64	THR	2.6
53	2y	94	ALA	2.6
21	2Z	125	LEU	2.6
32	1a	1026	G	2.6
38	2g	156	TRP	2.6
41	2j	89	ASP	2.6
30	28	58	ILE	2.6
1	1A	1073	A	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
32	2a	1236	A	2.6
32	2a	1357	A	2.6
7	2H	164	TYR	2.6
32	1a	1037	C	2.6
14	2S	22	GLY	2.6
14	2S	33	LYS	2.6
26	24	54	GLY	2.6
34	1c	180	ALA	2.6
36	1e	132	ALA	2.6
40	2i	86	VAL	2.6
35	1d	135	LEU	2.6
41	2j	37	PRO	2.6
45	1n	7	ILE	2.6
40	2i	70	LYS	2.6
1	2A	2105	C	2.6
42	2k	75	TYR	2.6
44	1m	91	ARG	2.6
44	2m	98	VAL	2.6
38	1g	12	LEU	2.6
43	2l	10	LEU	2.6
47	1p	60	LEU	2.6
49	1r	31	LEU	2.6
1	1A	2130	U	2.6
33	2b	130	ARG	2.6
43	1l	63	GLY	2.6
50	2s	78	ARG	2.6
51	2t	83	ARG	2.6
40	2i	125	TYR	2.6
50	1s	61	TYR	2.6
52	1u	18	TYR	2.6
32	2a	979	C	2.6
32	2a	1037	C	2.6
35	2d	48	ALA	2.5
8	2I	107	VAL	2.5
47	1p	51	VAL	2.5
35	1d	11	LEU	2.5
44	2m	90	LEU	2.5
50	2s	5	LEU	2.5
32	2a	1446	U	2.5
48	1q	25	ARG	2.5
40	2i	117	HIS	2.5
1	2A	1084	A	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
14	2S	51	ALA	2.5
47	2p	7	ALA	2.5
47	2p	12	LYS	2.5
50	2s	6	LYS	2.5
7	2H	29	PRO	2.5
8	2I	19	VAL	2.5
15	2T	99	LEU	2.5
41	1j	72	VAL	2.5
22	10	42	GLY	2.5
35	1d	110	PHE	2.5
45	1n	20	ALA	2.5
10	2O	57	VAL	2.5
15	2T	112	ARG	2.5
23	21	62	VAL	2.5
29	27	46	VAL	2.5
29	27	47	ARG	2.5
1	2A	1536	C	2.5
42	2k	125	PHE	2.5
35	1d	179	GLU	2.5
44	2m	99	ARG	2.5
52	1u	10	ARG	2.5
7	2H	163	TYR	2.5
7	2H	25	LYS	2.5
32	1a	219	C	2.5
33	2b	101	MET	2.5
40	2i	87	GLN	2.5
6	2G	72	ARG	2.5
45	2n	26	ARG	2.5
49	1r	38	GLU	2.5
33	1b	123	ALA	2.5
43	2l	30	ALA	2.5
15	2T	66	VAL	2.5
33	1b	121	LEU	2.5
33	1b	227	GLY	2.5
34	2c	193	TYR	2.5
40	1i	19	LEU	2.5
40	2i	44	VAL	2.5
51	2t	26	ASN	2.5
32	1a	1030(D)	A	2.5
15	2T	111	ARG	2.5
32	2a	1006	C	2.5
39	2h	111	ILE	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
34	2c	179	ARG	2.5
1	1A	2133	G	2.5
31	29	15	LYS	2.5
32	2a	1224	G	2.5
48	1q	37	LYS	2.5
7	2H	20	ALA	2.5
4	2E	150	VAL	2.5
19	2X	92	LEU	2.5
44	2m	70	LEU	2.5
48	1q	91	ARG	2.5
33	2b	152	PHE	2.5
38	2g	27	ILE	2.5
39	1h	134	ILE	2.5
48	2q	27	PHE	2.5
6	2G	137	GLU	2.5
11	2P	34	GLY	2.5
45	2n	28	GLY	2.5
47	1p	44	THR	2.5
7	2H	42	ARG	2.4
21	2Z	155	LEU	2.4
34	2c	43	LEU	2.4
38	1g	85	TYR	2.4
42	2k	14	VAL	2.4
36	2e	131	ILE	2.4
47	2p	33	ILE	2.4
44	2m	82	MET	2.4
34	2c	3	ASN	2.4
44	2m	107	ALA	2.4
1	2A	2191	G	2.4
11	2P	71	VAL	2.4
21	2Z	3	TYR	2.4
39	1h	38	ILE	2.4
53	2y	68	GLU	2.4
33	1b	130	ARG	2.4
36	2e	14	ARG	2.4
40	1i	107	ARG	2.4
40	1i	121	ARG	2.4
41	2j	55	LYS	2.4
1	1A	2107	C	2.4
7	2H	44	VAL	2.4
1	1A	2151	G	2.4
7	2H	4	ILE	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
15	2T	102	ILE	2.4
39	2h	45	ILE	2.4
6	2G	86	MET	2.4
34	2c	104	GLN	2.4
35	1d	209	ARG	2.4
50	1s	75	ALA	2.4
51	1t	40	ALA	2.4
1	2A	887	A	2.4
53	2y	72	THR	2.4
6	1G	48	GLU	2.4
7	2H	104	GLU	2.4
34	1c	196	LEU	2.4
37	1f	98	LEU	2.4
41	2j	85	LEU	2.4
53	2y	61	LEU	2.4
20	2Y	42	VAL	2.4
40	1i	14	VAL	2.4
11	1P	15	ARG	2.4
53	2y	17	ARG	2.4
1	1A	2156	G	2.4
40	2i	21	PRO	2.4
38	2g	116	ALA	2.4
1	1A	2176	A	2.4
1	2A	1118	C	2.4
1	2A	2128	C	2.4
3	2D	147	LEU	2.4
39	1h	112	LEU	2.4
41	2j	46	ARG	2.4
50	2s	81	ARG	2.4
40	2i	28	VAL	2.4
11	2P	37	GLY	2.4
15	1T	38	ASN	2.4
39	2h	9	MET	2.4
41	2j	23	ILE	2.4
7	2H	21	PRO	2.4
33	1b	132	LYS	2.4
45	1n	17	LYS	2.4
51	2t	7	LYS	2.4
1	1A	2792	G	2.4
4	2E	120	TRP	2.4
47	1p	59	TRP	2.4
35	2d	73	ARG	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
48	2q	98	LEU	2.4
1	2A	889	C	2.4
1	2A	2177	C	2.4
50	1s	58	VAL	2.4
1	1A	2118	U	2.4
40	1i	63	ILE	2.4
47	1p	4	ILE	2.4
30	28	48	PHE	2.4
49	1r	24	ALA	2.4
51	1t	66	ALA	2.4
7	2H	87	LEU	2.4
1	2A	2149	G	2.3
1	2A	2151	G	2.3
23	21	23	LYS	2.3
44	1m	89	GLY	2.3
44	1m	117	VAL	2.3
1	2A	1082	U	2.3
21	2Z	57	ILE	2.3
29	17	47	ARG	2.3
33	2b	127	ILE	2.3
53	2y	3	MET	2.3
47	1p	39	TYR	2.3
48	2q	32	TYR	2.3
45	2n	22	THR	2.3
40	2i	116	LYS	2.3
45	2n	17	LYS	2.3
51	1t	68	LYS	2.3
8	2I	12	LEU	2.3
18	2W	82	LEU	2.3
51	2t	62	LEU	2.3
6	2G	159	VAL	2.3
32	1a	1030(A)	G	2.3
41	2j	24	VAL	2.3
48	1q	10	VAL	2.3
41	1j	66	ARG	2.3
45	2n	14	PRO	2.3
45	2n	57	ARG	2.3
46	2o	68	ARG	2.3
50	2s	76	PRO	2.3
51	1t	80	ARG	2.3
51	1t	83	ARG	2.3
32	2a	1492	A	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
8	2I	25	TYR	2.3
38	2g	25	ALA	2.3
41	1j	57	LYS	2.3
41	2j	87	THR	2.3
43	2l	8	ASN	2.3
3	1D	155	LEU	2.3
7	2H	98	LEU	2.3
50	1s	59	PRO	2.3
31	29	11	CYS	2.3
1	2A	614(B)	G	2.3
1	2A	2181	G	2.3
1	2A	2807	G	2.3
36	2e	84	PHE	2.3
40	2i	61	ALA	2.3
5	2F	134	GLY	2.3
31	29	31	LYS	2.3
40	1i	109	VAL	2.3
1	1A	2150	U	2.3
14	2S	40	ILE	2.3
53	1y	78	ILE	2.3
26	14	18	CYS	2.3
38	2g	78	ARG	2.3
48	2q	68	ARG	2.3
50	2s	77	THR	2.3
35	1d	101	LEU	2.3
47	1p	35	LYS	2.3
47	1p	76	GLN	2.3
9	2N	140	VAL	2.3
1	1A	2113	U	2.3
53	2y	76	GLU	2.3
24	22	57	ILE	2.3
47	1p	28	ARG	2.3
41	2j	59	SER	2.3
51	1t	47	GLY	2.3
30	28	29	LYS	2.3
34	2c	71	ALA	2.3
51	1t	12	ALA	2.3
53	2y	69	ASP	2.3
1	1A	2136	C	2.3
33	2b	115	LEU	2.3
23	21	30	VAL	2.3
1	1A	1101	U	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
31	29	9	ARG	2.3
40	2i	107	ARG	2.3
40	2i	25	LYS	2.3
44	2m	13	LYS	2.3
15	1T	47	GLY	2.3
6	2G	58	GLN	2.3
38	1g	120	ILE	2.3
26	14	52	THR	2.3
12	2Q	34	LEU	2.3
47	2p	6	LEU	2.3
1	1A	1070	A	2.2
1	1A	2126	A	2.2
6	1G	21	ARG	2.2
36	1e	92	LYS	2.2
40	2i	20	ARG	2.2
44	1m	93	ARG	2.2
44	2m	7	VAL	2.2
21	2Z	197	ILE	2.2
36	2e	11	ILE	2.2
43	1l	7	ILE	2.2
3	1D	254	THR	2.2
34	1c	167	TRP	2.2
53	2y	53	THR	2.2
44	2m	92	HIS	2.2
3	2D	182	LEU	2.2
8	2I	72	LEU	2.2
25	23	53	LEU	2.2
44	2m	66	LEU	2.2
47	1p	27	LYS	2.2
52	1u	6	ARG	2.2
53	2y	75	ASN	2.2
1	2A	2134	A	2.2
15	1T	37	GLY	2.2
32	2a	1358	U	2.2
53	1y	42	SER	2.2
3	2D	106	ILE	2.2
39	2h	6	ILE	2.2
50	2s	31	ILE	2.2
22	20	46	LYS	2.2
48	1q	7	THR	2.2
50	1s	69	HIS	2.2
44	2m	104	ARG	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
48	2q	22	LEU	2.2
34	1c	174	PRO	2.2
36	2e	29	GLY	2.2
48	1q	86	GLU	2.2
11	1P	71	VAL	2.2
32	1a	161	A	2.2
51	2t	74	LYS	2.2
38	2g	155	ARG	2.2
40	1i	10	ARG	2.2
51	1t	25	ARG	2.2
33	2b	70	PHE	2.2
1	1A	2152	G	2.2
32	2a	1021	G	2.2
34	1c	178	LEU	2.2
45	2n	54	PRO	2.2
1	2A	2136	C	2.2
1	2A	2150	U	2.2
32	2a	1027	C	2.2
44	1m	110	ARG	2.2
32	2a	1235	U	2.2
47	2p	21	VAL	2.2
53	2y	20	VAL	2.2
1	1A	2158	A	2.2
1	1A	2790	A	2.2
1	2A	1088	A	2.2
32	2a	1363(A)	A	2.2
42	1k	60	ALA	2.2
1	1A	2162	G	2.2
1	1A	2168	G	2.2
34	2c	148	GLY	2.2
39	2h	131	GLY	2.2
40	2i	60	ASP	2.2
14	1S	3	ARG	2.2
35	1d	76	ARG	2.2
48	2q	91	ARG	2.2
51	2t	22	ARG	2.2
1	2A	2178	C	2.2
32	1a	63	C	2.2
38	1g	11	GLN	2.2
39	1h	92	ARG	2.2
1	2A	2190	G	2.2
50	1s	57	HIS	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	2A	2180	U	2.2
32	2a	1150	U	2.2
32	2a	1219	U	2.2
33	2b	139	LYS	2.2
3	2D	50	THR	2.2
7	2H	148	ILE	2.2
9	2N	85	ILE	2.2
15	2T	48	ILE	2.2
22	20	71	ASP	2.2
38	2g	42	ILE	2.2
43	2l	6	THR	2.2
41	1j	54	PHE	2.2
35	2d	136	PRO	2.2
39	2h	84	ARG	2.2
45	1n	36	PHE	2.2
51	2t	86	ARG	2.2
1	1A	1095	A	2.2
4	2E	195	LEU	2.2
45	1n	32	SER	2.2
48	2q	37	LYS	2.1
35	2d	4	TYR	2.1
1	1A	2123	G	2.1
1	2A	1091	G	2.1
40	1i	26	VAL	2.1
3	2D	156	ALA	2.1
3	2D	272	ALA	2.1
40	1i	119	ALA	2.1
41	1j	20	ALA	2.1
38	2g	41	ARG	2.1
14	2S	35	ILE	2.1
45	1n	55	GLY	2.1
1	2A	886	C	2.1
7	2H	18	GLU	2.1
22	20	47	PRO	2.1
32	2a	1249	C	2.1
34	2c	128	PHE	2.1
43	1l	60	LEU	2.1
6	2G	74	LYS	2.1
31	29	13	LYS	2.1
40	2i	78	LYS	2.1
23	21	71	TYR	2.1
47	1p	29	ASP	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
30	28	23	VAL	2.1
35	2d	3	ARG	2.1
35	2d	8	VAL	2.1
35	2d	203	VAL	2.1
8	2I	86	THR	2.1
44	2m	105	THR	2.1
41	2j	98	ILE	2.1
43	2l	94	PRO	2.1
48	1q	28	PRO	2.1
48	2q	59	ILE	2.1
6	1G	139	LEU	2.1
48	1q	26	GLN	2.1
41	1j	59	SER	2.1
41	2j	56	HIS	2.1
7	2H	132	ARG	2.1
11	2P	79	ARG	2.1
43	1l	97	ARG	2.1
50	2s	36	ARG	2.1
4	1E	151	TYR	2.1
9	2N	31	ALA	2.1
40	1i	127	LYS	2.1
43	2l	55	VAL	2.1
33	2b	135	GLN	2.1
35	2d	5	ILE	2.1
35	2d	110	PHE	2.1
35	2d	58	LEU	2.1
43	2l	77	LEU	2.1
44	1m	48	LEU	2.1
33	2b	114	ARG	2.1
48	2q	66	SER	2.1
53	1y	87	LYS	2.1
44	2m	95	GLY	2.1
1	1A	2135	A	2.1
1	2A	2897	U	2.1
7	2H	94	TYR	2.1
8	1I	19	VAL	2.1
34	2c	60	ALA	2.1
34	2c	184	TYR	2.1
36	1e	20	GLN	2.1
40	1i	36	TYR	2.1
42	2k	87	THR	2.1
48	1q	88	TYR	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
34	2c	174	PRO	2.1
53	2y	37	PRO	2.1
34	1c	202	ILE	2.1
51	1t	63	ILE	2.1
35	2d	75	PHE	2.1
35	2d	115	ARG	2.1
40	1i	75	ASP	2.1
43	2l	60	LEU	2.1
48	1q	84	LEU	2.1
1	1A	2174	C	2.1
32	2a	1220	G	2.1
34	2c	28	GLN	2.1
40	1i	124	GLN	2.1
23	21	4	VAL	2.1
38	2g	118	VAL	2.1
51	1t	77	ALA	2.1
26	24	52	THR	2.1
41	2j	60	ARG	2.1
44	2m	94	ARG	2.1
47	1p	42	ARG	2.1
7	2H	89	ILE	2.1
39	2h	4	ASP	2.1
39	2h	56	LYS	2.1
7	2H	33	LEU	2.1
8	2I	101	LEU	2.1
14	2S	58	LEU	2.1
34	1c	204	LEU	2.1
34	2c	178	LEU	2.1
35	1d	58	LEU	2.1
43	1l	62	SER	2.1
8	2I	34	GLY	2.1
50	2s	56	GLN	2.1
33	2b	48	MET	2.1
3	2D	276	LYS	2.1
8	1I	36	ALA	2.1
26	14	55	ARG	2.1
34	1c	160	ALA	2.1
51	2t	14	LYS	2.1
31	29	7	VAL	2.1
32	1a	841	U	2.1
34	2c	195	VAL	2.1
47	1p	20	VAL	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
18	1W	96	ILE	2.1
31	19	26	ILE	2.1
31	29	10	ILE	2.1
32	1a	1004	A	2.1
8	2I	5	LEU	2.1
13	1R	18	LEU	2.1
35	2d	186	LEU	2.1
42	2k	98	LEU	2.1
42	2k	118	GLY	2.1
46	2o	89	GLY	2.1
22	20	55	ARG	2.1
41	2j	91	PRO	2.0
32	2a	1042	G	2.0
6	1G	88	ILE	2.0
35	1d	4	TYR	2.0
36	2e	31	LEU	2.0
36	2e	130	ASN	2.0
32	2a	1157	A	2.0
51	2t	36	LEU	2.0
53	1y	41	LEU	2.0
35	1d	86	LYS	2.0
30	28	46	ARG	2.0
35	2d	35	ARG	2.0
38	2g	79	ARG	2.0
6	2G	29	TRP	2.0
6	2G	49	ASP	2.0
50	2s	12	ASP	2.0
53	1y	70	MET	2.0
32	2a	1000	U	2.0
47	1p	67	THR	2.0
6	2G	138	GLN	2.0
34	2c	162	GLN	2.0
51	1t	26	ASN	2.0
33	2b	214	ILE	2.0
47	2p	74	LEU	2.0
51	1t	62	LEU	2.0
51	2t	47	GLY	2.0
6	1G	80	PHE	2.0
32	2a	1003	G	2.0
41	2j	58	ASP	2.0
7	2H	27	LYS	2.0
18	1W	74	ALA	2.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
36	2e	121	LYS	2.0
43	1l	28	LYS	2.0
34	2c	198	VAL	2.0
44	1m	15	VAL	2.0
51	2t	19	SER	2.0
1	1A	34	C	2.0
1	1A	1509	C	2.0
8	1I	6	LEU	2.0
9	2N	71	ILE	2.0
44	1m	19	LEU	2.0
48	1q	31	LEU	2.0
34	1c	201	TYR	2.0
40	1i	33	PHE	2.0
53	2y	82	GLU	2.0
1	2A	2319	G	2.0
7	2H	85	LYS	2.0
32	1a	1033	G	2.0
35	1d	166	LYS	2.0
51	1t	14	LYS	2.0

6.2 Non-standard residues in protein, DNA, RNA chains (i)

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95^{th} percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
32	2MG	2a	1207	24/25	0.88	0.20	83,89,95,100	0
1	5MU	2A	1915	21/22	0.89	0.12	81,88,95,108	0
32	M2G	2a	966	25/26	0.91	0.15	67,77,87,95	0
1	PSU	1A	1917	20/21	0.91	0.14	69,74,81,85	0
1	PSU	2A	1911	20/21	0.92	0.13	64,75,83,88	0
1	5MU	1A	1915	21/22	0.93	0.15	76,81,85,87	0
32	5MC	2a	967	21/22	0.93	0.17	72,78,84,88	0
32	2MG	1a	1207	24/25	0.93	0.14	65,75,77,81	0
43	0TD	2l	92	10/11	0.93	0.18	64,68,70,82	0
43	0TD	1l	92	10/11	0.94	0.15	57,62,66,72	0
32	PSU	1a	516	20/21	0.94	0.16	58,66,71,73	0
1	PSU	1A	1911	20/21	0.94	0.13	63,72,79,83	0
32	5MC	2a	1404	21/22	0.94	0.17	60,68,71,75	0
1	PSU	2A	1917	20/21	0.94	0.14	72,80,90,94	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
32	MA6	2a	1518	24/25	0.95	0.18	62,68,74,75	0
32	MA6	2a	1519	24/25	0.95	0.25	61,68,71,71	0
1	OMC	2A	1920	21/22	0.95	0.15	67,71,74,78	0
1	OMC	1A	1920	21/22	0.96	0.22	46,62,65,65	0
32	5MC	1a	1404	21/22	0.96	0.17	49,54,57,62	0
32	4OC	2a	1402	22/23	0.96	0.18	60,69,74,76	0
32	M2G	1a	966	25/26	0.96	0.18	60,66,70,74	0
32	PSU	2a	516	20/21	0.96	0.12	70,78,80,80	0
32	G7M	2a	527	24/25	0.96	0.16	61,68,75,80	0
32	5MC	1a	967	21/22	0.96	0.20	65,72,79,85	0
32	5MC	2a	1400	21/22	0.97	0.23	71,75,77,81	0
32	G7M	1a	527	24/25	0.97	0.21	54,59,65,68	0
32	MA6	1a	1518	24/25	0.97	0.20	48,54,59,60	0
32	5MC	2a	1407	21/22	0.97	0.16	61,69,73,81	0
32	UR3	2a	1498	21/22	0.97	0.18	63,67,70,72	0
32	MA6	1a	1519	24/25	0.97	0.20	46,55,60,61	0
32	4OC	1a	1402	22/23	0.97	0.19	53,58,62,67	0
1	2MU	2A	2552	21/23	0.97	0.19	39,45,48,49	0
1	5MC	1A	1942	21/22	0.98	0.16	35,44,49,58	0
32	5MC	1a	1400	21/22	0.98	0.18	53,58,63,66	0
1	5MC	1A	1962	21/22	0.98	0.19	35,40,43,45	0
1	2MA	1A	2503	23/24	0.98	0.22	21,29,32,34	0
32	5MC	1a	1407	21/22	0.98	0.18	50,60,64,65	0
32	UR3	1a	1498	21/22	0.98	0.19	52,57,61,66	0
1	5MU	2A	1939	21/22	0.98	0.18	35,42,47,50	0
1	5MC	2A	1942	21/22	0.98	0.17	50,58,64,66	0
1	5MC	2A	1962	21/22	0.98	0.16	43,50,54,64	0
1	OMG	2A	2251	24/25	0.98	0.20	40,44,47,48	0
1	2MA	2A	2503	23/24	0.98	0.20	33,37,43,49	0
1	PSU	1A	2605	20/21	0.98	0.19	29,34,40,40	0
1	PSU	2A	2605	20/21	0.98	0.20	34,42,46,48	0
1	2MU	1A	2552	21/23	0.99	0.20	28,36,39,45	0
1	OMG	1A	2251	24/25	0.99	0.20	26,32,35,35	0
1	5MU	1A	1939	21/22	0.99	0.20	29,33,37,38	0

6.3 Carbohydrates (i)

There are no monosaccharides in this entry.

6.4 Ligands (i)

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95^{th} percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3892	1/1	0.14	0.15	56,56,56,56	0
54	MG	1d	301	1/1	0.14	0.20	83,83,83,83	0
54	MG	1A	3985	1/1	0.18	0.18	41,41,41,41	0
54	MG	2A	3053	1/1	0.24	0.31	80,80,80,80	0
54	MG	2A	3327	1/1	0.36	0.35	78,78,78,78	0
54	MG	1a	1872	1/1	0.38	0.24	84,84,84,84	0
54	MG	2a	3024	1/1	0.42	0.21	85,85,85,85	0
54	MG	2A	3614	1/1	0.43	0.21	62,62,62,62	0
54	MG	1A	3842	1/1	0.45	0.13	63,63,63,63	0
54	MG	2a	3092	1/1	0.50	0.16	70,70,70,70	0
54	MG	1A	3462	1/1	0.51	0.22	80,80,80,80	0
54	MG	2a	3011	1/1	0.53	0.24	74,74,74,74	0
54	MG	1A	3197	1/1	0.53	0.34	69,69,69,69	0
54	MG	2A	3273	1/1	0.53	0.30	80,80,80,80	0
54	MG	1A	3532	1/1	0.54	0.09	58,58,58,58	0
54	MG	2A	3193	1/1	0.56	0.21	78,78,78,78	0
54	MG	2A	3584	1/1	0.56	0.11	44,44,44,44	0
54	MG	1A	3989	1/1	0.56	0.20	80,80,80,80	0
54	MG	2A	3072	1/1	0.57	0.66	59,59,59,59	0
54	MG	2I	201	1/1	0.58	0.28	77,77,77,77	0
54	MG	1a	1778	1/1	0.58	0.17	79,79,79,79	0
54	MG	2A	3230	1/1	0.59	0.10	83,83,83,83	0
54	MG	2A	3190	1/1	0.59	0.14	61,61,61,61	0
54	MG	2a	3057	1/1	0.59	0.09	72,72,72,72	0
54	MG	1B	216	1/1	0.59	0.54	67,67,67,67	0
54	MG	1B	223	1/1	0.60	0.09	65,65,65,65	0
54	MG	1A	3217	1/1	0.60	0.22	84,84,84,84	0
54	MG	1A	3198	1/1	0.60	0.28	67,67,67,67	0
54	MG	1A	3832	1/1	0.61	0.37	47,47,47,47	0
54	MG	1B	226	1/1	0.62	0.19	81,81,81,81	0
54	MG	1a	1781	1/1	0.62	0.17	67,67,67,67	0
54	MG	2a	3060	1/1	0.63	0.29	82,82,82,82	0
54	MG	1A	3292	1/1	0.63	0.08	84,84,84,84	0
54	MG	1a	1813	1/1	0.64	0.15	81,81,81,81	0
54	MG	2A	3476	1/1	0.64	0.41	65,65,65,65	0
54	MG	2a	3075	1/1	0.64	0.24	76,76,76,76	0
54	MG	2a	3087	1/1	0.64	0.11	78,78,78,78	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3666	1/1	0.64	0.15	82,82,82,82	0
54	MG	2A	3499	1/1	0.65	0.16	81,81,81,81	0
54	MG	1A	3986	1/1	0.65	0.15	52,52,52,52	0
54	MG	2A	3398	1/1	0.65	0.14	42,42,42,42	0
54	MG	2A	3216	1/1	0.65	0.16	73,73,73,73	0
54	MG	2a	3144	1/1	0.65	0.13	81,81,81,81	0
54	MG	1A	3396	1/1	0.66	0.19	54,54,54,54	0
54	MG	1a	1742	1/1	0.66	0.23	68,68,68,68	0
54	MG	1A	3334	1/1	0.66	0.28	65,65,65,65	0
54	MG	2A	3207	1/1	0.66	0.24	70,70,70,70	0
54	MG	2A	3693	1/1	0.66	0.16	46,46,46,46	0
54	MG	2A	3463	1/1	0.66	0.73	61,61,61,61	0
54	MG	1A	3516	1/1	0.66	0.12	56,56,56,56	0
54	MG	1A	3170	1/1	0.67	0.23	66,66,66,66	0
54	MG	2a	3012	1/1	0.67	0.16	78,78,78,78	0
54	MG	2a	3020	1/1	0.67	0.15	90,90,90,90	0
54	MG	15	106	1/1	0.67	0.20	49,49,49,49	0
54	MG	1a	1604	1/1	0.67	0.18	69,69,69,69	0
54	MG	2A	3275	1/1	0.67	0.19	73,73,73,73	0
54	MG	2A	3191	1/1	0.67	0.15	54,54,54,54	0
54	MG	1a	1710	1/1	0.67	0.12	72,72,72,72	0
54	MG	2A	3699	1/1	0.67	0.27	70,70,70,70	0
54	MG	1A	3476	1/1	0.67	0.11	51,51,51,51	0
54	MG	2A	3350	1/1	0.68	0.17	59,59,59,59	0
54	MG	1A	3664	1/1	0.68	0.15	70,70,70,70	0
54	MG	1a	1643	1/1	0.68	0.16	63,63,63,63	0
54	MG	2A	3111	1/1	0.69	0.16	78,78,78,78	0
54	MG	1a	1851	1/1	0.69	0.07	55,55,55,55	0
54	MG	1A	3289	1/1	0.69	0.17	64,64,64,64	0
54	MG	2a	3003	1/1	0.69	0.18	71,71,71,71	0
54	MG	1A	3679	1/1	0.69	0.13	64,64,64,64	0
54	MG	1a	1701	1/1	0.69	0.23	82,82,82,82	0
54	MG	1A	3310	1/1	0.69	0.11	73,73,73,73	0
54	MG	2A	3123	1/1	0.70	0.21	79,79,79,79	0
54	MG	2G	202	1/1	0.70	0.18	81,81,81,81	0
54	MG	2A	3583	1/1	0.70	0.16	47,47,47,47	0
54	MG	1a	1624	1/1	0.70	0.16	66,66,66,66	0
54	MG	2A	3212	1/1	0.70	0.29	64,64,64,64	0
54	MG	2A	3466	1/1	0.70	0.09	85,85,85,85	0
54	MG	1A	3280	1/1	0.70	0.15	69,69,69,69	0
54	MG	2A	3713	1/1	0.71	0.13	66,66,66,66	0
54	MG	2a	3028	1/1	0.71	0.09	77,77,77,77	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2a	3038	1/1	0.71	0.33	82,82,82,82	0
54	MG	2a	3055	1/1	0.71	0.13	72,72,72,72	0
54	MG	1a	1679	1/1	0.71	0.13	52,52,52,52	0
54	MG	1a	1681	1/1	0.71	0.18	88,88,88,88	0
54	MG	1A	3447	1/1	0.71	0.16	41,41,41,41	0
54	MG	1A	3981	1/1	0.71	0.14	80,80,80,80	0
54	MG	1A	3598	1/1	0.71	0.10	48,48,48,48	0
54	MG	2A	3336	1/1	0.71	0.17	41,41,41,41	0
54	MG	2a	3182	1/1	0.71	0.26	84,84,84,84	0
54	MG	2A	3232	1/1	0.72	0.10	64,64,64,64	0
54	MG	1A	3172	1/1	0.72	0.21	62,62,62,62	0
54	MG	1A	3406	1/1	0.72	0.17	47,47,47,47	0
54	MG	1a	1801	1/1	0.72	0.10	69,69,69,69	0
54	MG	2F	303	1/1	0.72	0.20	62,62,62,62	0
54	MG	2A	3549	1/1	0.72	0.19	61,61,61,61	0
54	MG	2a	3061	1/1	0.72	0.19	75,75,75,75	0
54	MG	1A	3840	1/1	0.72	0.16	68,68,68,68	0
54	MG	1a	1640	1/1	0.72	0.16	69,69,69,69	0
54	MG	1A	3389	1/1	0.72	0.15	55,55,55,55	0
54	MG	2A	3625	1/1	0.72	0.16	56,56,56,56	0
54	MG	2A	3654	1/1	0.72	0.14	54,54,54,54	0
54	MG	1A	3591	1/1	0.73	0.25	44,44,44,44	0
54	MG	2a	3072	1/1	0.73	0.14	70,70,70,70	0
54	MG	2A	3023	1/1	0.73	0.20	64,64,64,64	0
54	MG	2A	3433	1/1	0.73	0.16	52,52,52,52	0
54	MG	1a	1798	1/1	0.73	0.10	73,73,73,73	0
54	MG	2B	211	1/1	0.73	0.26	66,66,66,66	0
54	MG	2A	3565	1/1	0.73	0.14	65,65,65,65	0
54	MG	2A	3093	1/1	0.74	0.11	70,70,70,70	0
54	MG	2a	3046	1/1	0.74	0.21	81,81,81,81	0
54	MG	1a	1641	1/1	0.74	0.21	74,74,74,74	0
54	MG	1A	3680	1/1	0.74	0.52	39,39,39,39	0
54	MG	2A	3154	1/1	0.74	0.10	63,63,63,63	0
54	MG	1a	1724	1/1	0.74	0.14	68,68,68,68	0
54	MG	1a	1662	1/1	0.74	0.10	74,74,74,74	0
54	MG	1a	1878	1/1	0.74	0.10	88,88,88,88	0
54	MG	1a	1775	1/1	0.74	0.06	76,76,76,76	0
54	MG	1a	1674	1/1	0.74	0.10	69,69,69,69	0
54	MG	1a	1633	1/1	0.74	0.12	66,66,66,66	0
54	MG	2a	3161	1/1	0.74	0.08	65,65,65,65	0
54	MG	1A	3327	1/1	0.74	0.34	61,61,61,61	0
54	MG	2A	3293	1/1	0.75	0.43	79,79,79,79	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3354	1/1	0.75	0.16	73,73,73,73	0
54	MG	1a	1797	1/1	0.75	0.11	78,78,78,78	0
54	MG	1y	202	1/1	0.75	0.12	74,74,74,74	0
54	MG	1A	3768	1/1	0.75	0.14	65,65,65,65	0
54	MG	1A	3610	1/1	0.75	0.10	48,48,48,48	0
54	MG	2A	3054	1/1	0.75	0.20	76,76,76,76	0
54	MG	2B	204	1/1	0.75	0.12	81,81,81,81	0
54	MG	11	104	1/1	0.75	0.16	70,70,70,70	0
54	MG	2A	3088	1/1	0.75	0.20	76,76,76,76	0
54	MG	2G	201	1/1	0.75	0.16	81,81,81,81	0
54	MG	1a	1842	1/1	0.75	0.22	62,62,62,62	0
54	MG	2A	3249	1/1	0.75	0.20	64,64,64,64	0
54	MG	1A	3959	1/1	0.75	0.09	71,71,71,71	0
54	MG	1a	1696	1/1	0.75	0.13	73,73,73,73	0
54	MG	2A	3288	1/1	0.75	0.20	78,78,78,78	0
54	MG	1a	1757	1/1	0.76	0.07	82,82,82,82	0
54	MG	2A	3256	1/1	0.76	0.19	60,60,60,60	0
54	MG	2A	3162	1/1	0.76	0.21	72,72,72,72	0
54	MG	2A	3033	1/1	0.76	0.11	68,68,68,68	0
54	MG	2A	3502	1/1	0.76	0.14	70,70,70,70	0
54	MG	2B	209	1/1	0.76	0.15	69,69,69,69	0
54	MG	1R	208	1/1	0.76	0.33	53,53,53,53	0
54	MG	1A	3392	1/1	0.76	0.09	75,75,75,75	0
54	MG	2A	3566	1/1	0.76	0.10	74,74,74,74	0
54	MG	1A	3150	1/1	0.76	0.12	56,56,56,56	0
54	MG	2a	3081	1/1	0.76	0.13	80,80,80,80	0
54	MG	1A	3027	1/1	0.76	0.18	71,71,71,71	0
54	MG	1H	201	1/1	0.76	0.19	64,64,64,64	0
54	MG	1t	201	1/1	0.76	0.36	69,69,69,69	0
54	MG	2A	3646	1/1	0.76	0.10	58,58,58,58	0
54	MG	1O	201	1/1	0.76	0.37	67,67,67,67	0
54	MG	2O	202	1/1	0.77	0.32	82,82,82,82	0
54	MG	2a	3002	1/1	0.77	0.20	70,70,70,70	0
54	MG	1A	3726	1/1	0.77	0.09	66,66,66,66	0
54	MG	2a	3010	1/1	0.77	0.18	75,75,75,75	0
54	MG	1A	3958	1/1	0.77	0.13	62,62,62,62	0
54	MG	1A	3234	1/1	0.77	0.18	55,55,55,55	0
54	MG	1A	3789	1/1	0.77	0.23	36,36,36,36	0
54	MG	1A	3982	1/1	0.77	0.19	66,66,66,66	0
54	MG	2A	3280	1/1	0.77	0.16	75,75,75,75	0
54	MG	2A	3629	1/1	0.77	0.14	44,44,44,44	0
54	MG	1a	1689	1/1	0.77	0.17	68,68,68,68	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3498	1/1	0.77	0.20	42,42,42,42	0
54	MG	1a	1699	1/1	0.77	0.20	66,66,66,66	0
54	MG	1a	1871	1/1	0.77	0.06	84,84,84,84	0
54	MG	2A	3176	1/1	0.77	0.33	60,60,60,60	0
54	MG	1A	3693	1/1	0.77	0.05	67,67,67,67	0
54	MG	1a	1704	1/1	0.77	0.14	76,76,76,76	0
54	MG	1a	1620	1/1	0.77	0.26	68,68,68,68	0
54	MG	1A	3719	1/1	0.77	0.12	70,70,70,70	0
54	MG	1A	3862	1/1	0.77	0.10	70,70,70,70	0
54	MG	2A	3213	1/1	0.77	0.15	62,62,62,62	0
54	MG	1B	218	1/1	0.77	0.15	47,47,47,47	0
54	MG	1A	3886	1/1	0.77	0.24	70,70,70,70	0
54	MG	2j	201	1/1	0.77	0.18	74,74,74,74	0
54	MG	1y	203	1/1	0.78	0.12	83,83,83,83	0
54	MG	2A	3633	1/1	0.78	0.15	79,79,79,79	0
54	MG	1A	4015	1/1	0.78	0.11	46,46,46,46	0
54	MG	1A	3766	1/1	0.78	0.08	57,57,57,57	0
54	MG	2A	3655	1/1	0.78	0.20	78,78,78,78	0
54	MG	2A	3042	1/1	0.78	0.35	81,81,81,81	0
54	MG	2A	3045	1/1	0.78	0.20	65,65,65,65	0
54	MG	1A	3926	1/1	0.78	0.21	32,32,32,32	0
54	MG	2A	3703	1/1	0.78	0.19	68,68,68,68	0
54	MG	1A	3660	1/1	0.78	0.23	72,72,72,72	0
54	MG	2A	3729	1/1	0.78	0.14	62,62,62,62	0
54	MG	1a	1827	1/1	0.78	0.10	64,64,64,64	0
54	MG	1A	3449	1/1	0.78	0.12	57,57,57,57	0
54	MG	2A	3523	1/1	0.78	0.13	63,63,63,63	0
54	MG	1E	302	1/1	0.78	0.40	38,38,38,38	0
54	MG	1A	3159	1/1	0.78	0.17	49,49,49,49	0
54	MG	1a	1652	1/1	0.78	0.11	73,73,73,73	0
54	MG	1A	3438	1/1	0.78	0.17	46,46,46,46	0
54	MG	1A	3318	1/1	0.78	0.30	72,72,72,72	0
54	MG	1A	3502	1/1	0.78	0.16	63,63,63,63	0
54	MG	1A	3615	1/1	0.78	0.14	50,50,50,50	0
54	MG	1A	3505	1/1	0.79	0.11	44,44,44,44	0
54	MG	1a	1717	1/1	0.79	0.25	72,72,72,72	0
54	MG	2A	3195	1/1	0.79	0.13	68,68,68,68	0
54	MG	2A	3197	1/1	0.79	0.14	51,51,51,51	0
54	MG	1g	201	1/1	0.79	0.22	75,75,75,75	0
54	MG	1A	3942	1/1	0.79	0.60	61,61,61,61	0
54	MG	1F	315	1/1	0.79	0.43	50,50,50,50	0
54	MG	1G	202	1/1	0.79	0.17	63,63,63,63	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3944	1/1	0.79	0.20	60,60,60,60	0
54	MG	1a	1659	1/1	0.79	0.18	71,71,71,71	0
54	MG	1A	4000	1/1	0.79	0.23	70,70,70,70	0
54	MG	1A	3453	1/1	0.79	0.25	74,74,74,74	0
54	MG	2A	3634	1/1	0.79	0.24	37,37,37,37	0
54	MG	1B	211	1/1	0.79	0.12	55,55,55,55	0
54	MG	2A	3652	1/1	0.79	0.12	64,64,64,64	0
54	MG	1A	3882	1/1	0.79	0.24	55,55,55,55	0
54	MG	1a	1809	1/1	0.79	0.09	74,74,74,74	0
54	MG	1a	1686	1/1	0.79	0.09	75,75,75,75	0
54	MG	1a	1819	1/1	0.79	0.31	73,73,73,73	0
54	MG	2A	3095	1/1	0.79	0.16	68,68,68,68	0
54	MG	17	105	1/1	0.79	0.34	64,64,64,64	0
54	MG	1A	3521	1/1	0.79	0.15	75,75,75,75	0
54	MG	2A	3126	1/1	0.79	0.10	73,73,73,73	0
54	MG	1B	221	1/1	0.79	0.19	61,61,61,61	0
54	MG	1a	1853	1/1	0.79	0.07	75,75,75,75	0
54	MG	2a	3175	1/1	0.79	0.06	67,67,67,67	0
54	MG	1a	1623	1/1	0.79	0.11	63,63,63,63	0
54	MG	1A	3495	1/1	0.79	0.18	40,40,40,40	0
54	MG	1i	3101	1/1	0.80	0.21	66,66,66,66	0
54	MG	2A	3184	1/1	0.80	0.22	70,70,70,70	0
54	MG	1A	3062	1/1	0.80	0.31	42,42,42,42	0
54	MG	2A	3429	1/1	0.80	0.12	43,43,43,43	0
54	MG	1A	3132	1/1	0.80	0.21	53,53,53,53	0
54	MG	2A	3441	1/1	0.80	0.35	80,80,80,80	0
54	MG	1A	3578	1/1	0.80	0.15	61,61,61,61	0
54	MG	1A	3244	1/1	0.80	0.12	70,70,70,70	0
54	MG	1a	1706	1/1	0.80	0.14	80,80,80,80	0
54	MG	2A	3488	1/1	0.80	0.09	61,61,61,61	0
54	MG	2A	3205	1/1	0.80	0.14	72,72,72,72	0
54	MG	1a	1656	1/1	0.80	0.35	74,74,74,74	0
54	MG	2a	3009	1/1	0.80	0.13	76,76,76,76	0
54	MG	2A	3516	1/1	0.80	0.13	46,46,46,46	0
54	MG	2A	3210	1/1	0.80	0.23	66,66,66,66	0
54	MG	1A	3687	1/1	0.80	0.08	64,64,64,64	0
54	MG	1a	1831	1/1	0.80	0.09	92,92,92,92	0
54	MG	1a	1721	1/1	0.80	0.18	82,82,82,82	0
54	MG	2a	3025	1/1	0.80	0.12	71,71,71,71	0
54	MG	2A	3568	1/1	0.80	0.11	66,66,66,66	0
54	MG	2a	3030	1/1	0.80	0.08	68,68,68,68	0
54	MG	2A	3067	1/1	0.80	0.13	63,63,63,63	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3597	1/1	0.80	0.20	56,56,56,56	0
54	MG	2A	3242	1/1	0.80	0.14	64,64,64,64	0
54	MG	2A	3619	1/1	0.80	0.17	49,49,49,49	0
54	MG	1A	3402	1/1	0.80	0.23	29,29,29,29	0
54	MG	1A	3259	1/1	0.80	0.25	55,55,55,55	0
54	MG	2A	3264	1/1	0.80	0.10	71,71,71,71	0
54	MG	2A	3265	1/1	0.80	0.26	85,85,85,85	0
54	MG	1A	3464	1/1	0.80	0.13	59,59,59,59	0
54	MG	1A	3925	1/1	0.80	0.08	53,53,53,53	0
54	MG	2a	3088	1/1	0.80	0.15	70,70,70,70	0
54	MG	1a	1879	1/1	0.80	0.18	75,75,75,75	0
54	MG	2a	3101	1/1	0.80	0.17	71,71,71,71	0
54	MG	1a	1880	1/1	0.80	0.19	69,69,69,69	0
54	MG	2A	3291	1/1	0.80	0.23	64,64,64,64	0
54	MG	2a	3169	1/1	0.80	0.10	68,68,68,68	0
54	MG	1A	3992	1/1	0.80	0.85	60,60,60,60	0
54	MG	2a	3180	1/1	0.80	0.06	76,76,76,76	0
54	MG	2A	3305	1/1	0.80	0.17	66,66,66,66	0
54	MG	1a	1786	1/1	0.80	0.19	74,74,74,74	0
54	MG	2a	3019	1/1	0.81	0.17	60,60,60,60	0
54	MG	1A	3014	1/1	0.81	0.26	62,62,62,62	0
54	MG	1A	3548	1/1	0.81	0.18	51,51,51,51	0
54	MG	2A	3469	1/1	0.81	0.22	63,63,63,63	0
54	MG	1A	3856	1/1	0.81	0.11	58,58,58,58	0
54	MG	1a	1761	1/1	0.81	0.20	70,70,70,70	0
54	MG	2A	3276	1/1	0.81	0.13	70,70,70,70	0
54	MG	2a	3040	1/1	0.81	0.09	64,64,64,64	0
54	MG	2a	3042	1/1	0.81	0.28	75,75,75,75	0
54	MG	1h	202	1/1	0.81	0.21	74,74,74,74	0
54	MG	2A	3510	1/1	0.81	0.10	68,68,68,68	0
54	MG	1A	3772	1/1	0.81	0.16	58,58,58,58	0
54	MG	2A	3726	1/1	0.81	0.20	71,71,71,71	0
54	MG	1o	101	1/1	0.81	0.11	77,77,77,77	0
54	MG	2A	3534	1/1	0.81	0.20	74,74,74,74	0
54	MG	2A	3537	1/1	0.81	0.08	68,68,68,68	0
54	MG	1A	3517	1/1	0.81	0.12	43,43,43,43	0
54	MG	1a	1847	1/1	0.81	0.32	68,68,68,68	0
54	MG	2A	3325	1/1	0.81	0.17	65,65,65,65	0
54	MG	1H	202	1/1	0.81	0.16	56,56,56,56	0
54	MG	2A	3147	1/1	0.81	0.15	55,55,55,55	0
54	MG	1A	3953	1/1	0.81	0.09	70,70,70,70	0
54	MG	1A	3451	1/1	0.81	0.20	64,64,64,64	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3401	1/1	0.81	0.20	54,54,54,54	0
54	MG	2a	3171	1/1	0.81	0.11	71,71,71,71	0
54	MG	2A	3417	1/1	0.81	0.25	57,57,57,57	0
54	MG	2A	3173	1/1	0.81	0.13	71,71,71,71	0
54	MG	1B	225	1/1	0.81	0.12	49,49,49,49	0
54	MG	1a	1722	1/1	0.81	0.14	77,77,77,77	0
54	MG	1a	1718	1/1	0.82	0.19	69,69,69,69	0
54	MG	1A	3874	1/1	0.82	0.18	68,68,68,68	0
54	MG	1A	3792	1/1	0.82	0.21	45,45,45,45	0
54	MG	2A	3446	1/1	0.82	0.13	40,40,40,40	0
54	MG	2F	302	1/1	0.82	0.17	55,55,55,55	0
54	MG	2A	3457	1/1	0.82	0.32	70,70,70,70	0
54	MG	1B	229	1/1	0.82	0.27	80,80,80,80	0
54	MG	1D	311	1/1	0.82	0.69	54,54,54,54	0
54	MG	2A	3468	1/1	0.82	0.18	67,67,67,67	0
54	MG	2I	202	1/1	0.82	0.08	70,70,70,70	0
54	MG	1a	1744	1/1	0.82	0.13	86,86,86,86	0
54	MG	28	103	1/1	0.82	0.23	60,60,60,60	0
54	MG	1a	1755	1/1	0.82	0.16	63,63,63,63	0
54	MG	1a	1647	1/1	0.82	0.14	61,61,61,61	0
54	MG	2a	3005	1/1	0.82	0.33	66,66,66,66	0
54	MG	2A	3496	1/1	0.82	0.17	60,60,60,60	0
54	MG	1a	1651	1/1	0.82	0.22	65,65,65,65	0
54	MG	2A	3005	1/1	0.82	0.17	60,60,60,60	0
54	MG	1A	3816	1/1	0.82	0.09	80,80,80,80	0
54	MG	2A	3030	1/1	0.82	0.14	69,69,69,69	0
54	MG	1A	3984	1/1	0.82	0.10	57,57,57,57	0
54	MG	1A	3890	1/1	0.82	0.11	33,33,33,33	0
54	MG	1a	1661	1/1	0.82	0.14	66,66,66,66	0
54	MG	1A	3477	1/1	0.82	0.23	67,67,67,67	0
54	MG	1A	3035	1/1	0.82	0.25	45,45,45,45	0
54	MG	1A	3107	1/1	0.82	0.27	41,41,41,41	0
54	MG	1P	203	1/1	0.82	0.46	77,77,77,77	0
54	MG	2A	3079	1/1	0.82	0.46	61,61,61,61	0
54	MG	1a	1684	1/1	0.82	0.13	66,66,66,66	0
54	MG	2a	3051	1/1	0.82	0.21	73,73,73,73	0
54	MG	2A	3607	1/1	0.82	0.05	70,70,70,70	0
54	MG	1A	3940	1/1	0.82	0.19	60,60,60,60	0
54	MG	1A	3851	1/1	0.82	0.16	63,63,63,63	0
54	MG	1a	1692	1/1	0.82	0.14	74,74,74,74	0
54	MG	1B	205	1/1	0.82	0.12	50,50,50,50	0
54	MG	2A	3296	1/1	0.82	0.23	61,61,61,61	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3299	1/1	0.82	0.21	50,50,50,50	0
54	MG	1a	1698	1/1	0.82	0.29	67,67,67,67	0
54	MG	1A	3943	1/1	0.82	0.12	51,51,51,51	0
54	MG	1A	3672	1/1	0.82	0.12	44,44,44,44	0
54	MG	2A	3156	1/1	0.82	0.28	57,57,57,57	0
54	MG	2a	3108	1/1	0.82	0.18	64,64,64,64	0
54	MG	2A	3661	1/1	0.82	0.15	41,41,41,41	0
54	MG	1a	1609	1/1	0.82	0.17	69,69,69,69	0
54	MG	2A	3676	1/1	0.82	0.25	66,66,66,66	0
54	MG	2A	3396	1/1	0.82	0.15	52,52,52,52	0
54	MG	1A	3949	1/1	0.82	0.14	51,51,51,51	0
54	MG	2a	3179	1/1	0.82	0.12	78,78,78,78	0
54	MG	1A	3674	1/1	0.82	0.17	68,68,68,68	0
54	MG	2A	3414	1/1	0.82	0.09	67,67,67,67	0
54	MG	2a	3185	1/1	0.82	0.09	71,71,71,71	0
54	MG	1A	3865	1/1	0.82	0.10	63,63,63,63	0
54	MG	1A	3204	1/1	0.83	0.20	54,54,54,54	0
54	MG	1A	3367	1/1	0.83	0.11	57,57,57,57	0
54	MG	2A	3501	1/1	0.83	0.18	70,70,70,70	0
54	MG	2A	3236	1/1	0.83	0.10	66,66,66,66	0
54	MG	20	103	1/1	0.83	0.13	59,59,59,59	0
54	MG	1A	3054	1/1	0.83	0.48	39,39,39,39	0
54	MG	1P	204	1/1	0.83	0.27	47,47,47,47	0
54	MG	1A	3300	1/1	0.83	0.32	59,59,59,59	0
54	MG	10	107	1/1	0.83	0.08	69,69,69,69	0
54	MG	2a	3007	1/1	0.83	0.09	64,64,64,64	0
54	MG	2A	3076	1/1	0.83	0.25	55,55,55,55	0
54	MG	1A	3191	1/1	0.83	0.16	82,82,82,82	0
54	MG	1A	3749	1/1	0.83	0.11	49,49,49,49	0
54	MG	1a	1844	1/1	0.83	0.22	75,75,75,75	0
54	MG	1A	3758	1/1	0.83	0.20	60,60,60,60	0
54	MG	2A	3103	1/1	0.83	0.13	66,66,66,66	0
54	MG	2A	3110	1/1	0.83	0.10	69,69,69,69	0
54	MG	1A	4009	1/1	0.83	0.17	61,61,61,61	0
54	MG	1A	3490	1/1	0.83	0.19	31,31,31,31	0
54	MG	1a	1858	1/1	0.83	0.19	72,72,72,72	0
54	MG	2A	3623	1/1	0.83	0.13	46,46,46,46	0
54	MG	1A	3116	1/1	0.83	0.26	46,46,46,46	0
54	MG	1A	3322	1/1	0.83	0.20	62,62,62,62	0
54	MG	1A	3936	1/1	0.83	0.19	59,59,59,59	0
54	MG	1A	3781	1/1	0.83	0.09	50,50,50,50	0
54	MG	2A	3635	1/1	0.83	0.22	55,55,55,55	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3638	1/1	0.83	0.15	77,77,77,77	0
54	MG	2A	3165	1/1	0.83	0.13	67,67,67,67	0
54	MG	2A	3375	1/1	0.83	0.13	60,60,60,60	0
54	MG	2A	3383	1/1	0.83	0.09	48,48,48,48	0
54	MG	2A	3172	1/1	0.83	0.20	60,60,60,60	0
54	MG	1A	3634	1/1	0.83	0.11	52,52,52,52	0
54	MG	1A	3658	1/1	0.83	0.21	67,67,67,67	0
54	MG	1B	224	1/1	0.83	0.13	65,65,65,65	0
54	MG	1A	3436	1/1	0.83	0.14	66,66,66,66	0
54	MG	2a	3094	1/1	0.83	0.16	75,75,75,75	0
54	MG	1A	3051	1/1	0.83	0.63	56,56,56,56	0
54	MG	1A	3951	1/1	0.83	0.12	61,61,61,61	0
54	MG	1A	3835	1/1	0.83	0.10	68,68,68,68	0
54	MG	2a	3151	1/1	0.83	0.07	80,80,80,80	0
54	MG	2A	3717	1/1	0.83	0.12	64,64,64,64	0
54	MG	1a	1773	1/1	0.83	0.14	72,72,72,72	0
54	MG	1A	3328	1/1	0.83	0.36	69,69,69,69	0
54	MG	1E	310	1/1	0.83	0.12	56,56,56,56	0
54	MG	1A	3199	1/1	0.83	0.37	67,67,67,67	0
54	MG	1A	3960	1/1	0.83	0.12	84,84,84,84	0
54	MG	1A	3341	1/1	0.83	0.15	52,52,52,52	0
54	MG	2A	3038	1/1	0.83	0.22	69,69,69,69	0
54	MG	2A	3221	1/1	0.83	0.37	73,73,73,73	0
57	MPD	1a	1882	8/8	0.83	0.16	55,67,72,79	0
54	MG	1A	3022	1/1	0.84	0.20	52,52,52,52	0
54	MG	2D	310	1/1	0.84	0.20	52,52,52,52	0
54	MG	2A	3047	1/1	0.84	0.07	66,66,66,66	0
54	MG	2A	3485	1/1	0.84	0.09	71,71,71,71	0
54	MG	2A	3049	1/1	0.84	0.25	66,66,66,66	0
54	MG	2A	3222	1/1	0.84	0.48	57,57,57,57	0
54	MG	1A	4020	1/1	0.84	0.39	65,65,65,65	0
54	MG	1B	201	1/1	0.84	0.26	63,63,63,63	0
54	MG	2A	3064	1/1	0.84	0.11	45,45,45,45	0
54	MG	2A	3065	1/1	0.84	0.12	56,56,56,56	0
54	MG	2A	3247	1/1	0.84	0.20	66,66,66,66	0
54	MG	1A	3931	1/1	0.84	0.10	58,58,58,58	0
54	MG	2A	3532	1/1	0.84	0.14	73,73,73,73	0
54	MG	1A	3166	1/1	0.84	0.29	56,56,56,56	0
54	MG	1A	3439	1/1	0.84	0.18	34,34,34,34	0
54	MG	2A	3546	1/1	0.84	0.15	65,65,65,65	0
54	MG	1A	3830	1/1	0.84	0.26	76,76,76,76	0
54	MG	2A	3267	1/1	0.84	0.37	64,64,64,64	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3088	1/1	0.84	0.19	64,64,64,64	0
54	MG	1A	3691	1/1	0.84	0.25	55,55,55,55	0
54	MG	1A	3501	1/1	0.84	0.19	30,30,30,30	0
54	MG	1a	1719	1/1	0.84	0.10	70,70,70,70	0
54	MG	1A	3156	1/1	0.84	0.09	66,66,66,66	0
54	MG	1a	1873	1/1	0.84	0.10	75,75,75,75	0
54	MG	1A	3843	1/1	0.84	0.26	48,48,48,48	0
54	MG	2a	3037	1/1	0.84	0.17	68,68,68,68	0
54	MG	1B	228	1/1	0.84	0.09	63,63,63,63	0
54	MG	2A	3135	1/1	0.84	0.12	57,57,57,57	0
54	MG	1A	3844	1/1	0.84	0.06	40,40,40,40	0
54	MG	1A	3190	1/1	0.84	0.12	54,54,54,54	0
54	MG	1f	202	1/1	0.84	0.16	56,56,56,56	0
54	MG	1A	3734	1/1	0.84	0.06	75,75,75,75	0
54	MG	1A	3285	1/1	0.84	0.39	54,54,54,54	0
54	MG	2a	3058	1/1	0.84	0.10	60,60,60,60	0
54	MG	1A	3656	1/1	0.84	0.09	69,69,69,69	0
54	MG	2A	3651	1/1	0.84	0.06	48,48,48,48	0
54	MG	1A	3210	1/1	0.84	0.40	52,52,52,52	0
54	MG	1A	3291	1/1	0.84	0.07	72,72,72,72	0
54	MG	2A	3183	1/1	0.84	0.23	46,46,46,46	0
54	MG	1A	3769	1/1	0.84	0.20	41,41,41,41	0
54	MG	1A	3411	1/1	0.84	0.24	33,33,33,33	0
54	MG	2A	3668	1/1	0.84	0.06	73,73,73,73	0
54	MG	2A	3004	1/1	0.84	0.29	67,67,67,67	0
54	MG	2a	3095	1/1	0.84	0.12	74,74,74,74	0
54	MG	1a	1680	1/1	0.84	0.22	65,65,65,65	0
54	MG	1A	3775	1/1	0.84	0.18	57,57,57,57	0
54	MG	2a	3111	1/1	0.84	0.14	73,73,73,73	0
54	MG	2a	3117	1/1	0.84	0.14	78,78,78,78	0
54	MG	1A	3918	1/1	0.84	0.25	53,53,53,53	0
54	MG	2A	3706	1/1	0.84	0.14	68,68,68,68	0
54	MG	2A	3203	1/1	0.84	0.11	68,68,68,68	0
54	MG	2a	3167	1/1	0.84	0.08	60,60,60,60	0
54	MG	2A	3716	1/1	0.84	0.11	79,79,79,79	0
54	MG	1R	205	1/1	0.84	0.12	52,52,52,52	0
54	MG	2A	3723	1/1	0.84	0.13	77,77,77,77	0
54	MG	2A	3724	1/1	0.84	0.13	63,63,63,63	0
54	MG	1A	3546	1/1	0.84	0.07	55,55,55,55	0
54	MG	1a	1811	1/1	0.84	0.10	85,85,85,85	0
54	MG	2B	201	1/1	0.84	0.13	74,74,74,74	0
54	MG	2A	3467	1/1	0.84	0.20	49,49,49,49	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3043	1/1	0.84	0.19	54,54,54,54	0
54	MG	1A	3407	1/1	0.85	0.18	40,40,40,40	0
54	MG	2A	3130	1/1	0.85	0.19	66,66,66,66	0
54	MG	1A	3710	1/1	0.85	0.17	46,46,46,46	0
54	MG	1A	3941	1/1	0.85	0.09	67,67,67,67	0
54	MG	2T	201	1/1	0.85	0.08	53,53,53,53	0
54	MG	2W	203	1/1	0.85	0.13	77,77,77,77	0
54	MG	20	101	1/1	0.85	0.19	55,55,55,55	0
54	MG	2A	3148	1/1	0.85	0.24	69,69,69,69	0
54	MG	1a	1791	1/1	0.85	0.12	76,76,76,76	0
54	MG	1V	206	1/1	0.85	0.13	54,54,54,54	0
54	MG	1A	3621	1/1	0.85	0.13	69,69,69,69	0
54	MG	1A	3630	1/1	0.85	0.41	66,66,66,66	0
54	MG	1A	3070	1/1	0.85	0.48	45,45,45,45	0
54	MG	1A	3746	1/1	0.85	0.10	52,52,52,52	0
54	MG	2A	3598	1/1	0.85	0.13	55,55,55,55	0
54	MG	2A	3319	1/1	0.85	0.21	66,66,66,66	0
54	MG	1a	1812	1/1	0.85	0.38	72,72,72,72	0
54	MG	2a	3018	1/1	0.85	0.09	53,53,53,53	0
54	MG	1A	3357	1/1	0.85	0.14	44,44,44,44	0
54	MG	1a	1814	1/1	0.85	0.12	62,62,62,62	0
54	MG	1A	3540	1/1	0.85	0.15	35,35,35,35	0
54	MG	2A	3356	1/1	0.85	0.11	67,67,67,67	0
54	MG	2A	3363	1/1	0.85	0.16	65,65,65,65	0
54	MG	1a	1820	1/1	0.85	0.21	76,76,76,76	0
54	MG	2a	3035	1/1	0.85	0.09	76,76,76,76	0
54	MG	1A	3365	1/1	0.85	0.20	63,63,63,63	0
54	MG	2A	3385	1/1	0.85	0.16	36,36,36,36	0
54	MG	2A	3641	1/1	0.85	0.09	74,74,74,74	0
54	MG	2A	3643	1/1	0.85	0.06	69,69,69,69	0
54	MG	2A	3391	1/1	0.85	0.14	47,47,47,47	0
54	MG	2A	3046	1/1	0.85	0.09	64,64,64,64	0
54	MG	2A	3397	1/1	0.85	0.15	45,45,45,45	0
54	MG	1a	1829	1/1	0.85	0.07	72,72,72,72	0
54	MG	2A	3399	1/1	0.85	0.19	72,72,72,72	0
54	MG	2a	3059	1/1	0.85	0.09	72,72,72,72	0
54	MG	2A	3400	1/1	0.85	0.16	54,54,54,54	0
54	MG	1A	3153	1/1	0.85	0.21	57,57,57,57	0
54	MG	2a	3063	1/1	0.85	0.10	84,84,84,84	0
54	MG	2a	3068	1/1	0.85	0.07	81,81,81,81	0
54	MG	1A	3034	1/1	0.85	0.16	57,57,57,57	0
54	MG	1A	3673	1/1	0.85	0.13	35,35,35,35	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3690	1/1	0.85	0.08	66,66,66,66	0
54	MG	2A	3208	1/1	0.85	0.21	69,69,69,69	0
54	MG	1a	1637	1/1	0.85	0.15	60,60,60,60	0
54	MG	2a	3089	1/1	0.85	0.14	81,81,81,81	0
54	MG	1A	3294	1/1	0.85	0.14	74,74,74,74	0
54	MG	1A	3098	1/1	0.85	0.14	67,67,67,67	0
54	MG	2A	3070	1/1	0.85	0.41	60,60,60,60	0
54	MG	2A	3217	1/1	0.85	0.16	58,58,58,58	0
54	MG	1A	3136	1/1	0.85	0.15	53,53,53,53	0
54	MG	2A	3718	1/1	0.85	0.16	65,65,65,65	0
54	MG	1A	3607	1/1	0.85	0.19	56,56,56,56	0
54	MG	2a	3128	1/1	0.85	0.12	67,67,67,67	0
54	MG	1A	3796	1/1	0.85	0.14	60,60,60,60	0
54	MG	2A	3725	1/1	0.85	0.14	69,69,69,69	0
54	MG	1A	3798	1/1	0.85	0.34	65,65,65,65	0
54	MG	2A	3235	1/1	0.85	0.23	59,59,59,59	0
54	MG	1A	3994	1/1	0.85	0.16	47,47,47,47	0
54	MG	1A	3349	1/1	0.85	0.18	29,29,29,29	0
54	MG	2B	205	1/1	0.85	0.20	73,73,73,73	0
54	MG	1A	4006	1/1	0.85	0.38	63,63,63,63	0
54	MG	2A	3248	1/1	0.85	0.10	62,62,62,62	0
54	MG	1P	201	1/1	0.85	0.45	39,39,39,39	0
54	MG	1a	1673	1/1	0.85	0.13	62,62,62,62	0
54	MG	2a	3187	1/1	0.85	0.28	45,45,45,45	0
54	MG	2A	3118	1/1	0.85	0.22	76,76,76,76	0
54	MG	1A	3821	1/1	0.85	0.12	48,48,48,48	0
58	ARG	1F	318	12/12	0.85	0.18	57,65,72,73	0
54	MG	1a	1671	1/1	0.86	0.10	66,66,66,66	0
54	MG	25	101	1/1	0.86	0.74	48,48,48,48	0
54	MG	2A	3596	1/1	0.86	0.12	52,52,52,52	0
54	MG	1A	3895	1/1	0.86	0.07	63,63,63,63	0
54	MG	2A	3606	1/1	0.86	0.12	61,61,61,61	0
54	MG	1A	3913	1/1	0.86	0.22	39,39,39,39	0
54	MG	1A	3580	1/1	0.86	0.08	64,64,64,64	0
54	MG	1a	1804	1/1	0.86	0.14	75,75,75,75	0
54	MG	1A	3455	1/1	0.86	0.14	67,67,67,67	0
54	MG	1A	3460	1/1	0.86	0.16	50,50,50,50	0
54	MG	1A	3002	1/1	0.86	0.23	48,48,48,48	0
54	MG	2A	3367	1/1	0.86	0.13	56,56,56,56	0
54	MG	1T	202	1/1	0.86	0.16	70,70,70,70	0
54	MG	1A	4018	1/1	0.86	0.15	52,52,52,52	0
54	MG	1a	1690	1/1	0.86	0.24	76,76,76,76	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3601	1/1	0.86	0.19	49,49,49,49	0
54	MG	2a	3027	1/1	0.86	0.10	72,72,72,72	0
54	MG	1A	3695	1/1	0.86	0.11	77,77,77,77	0
54	MG	1A	3700	1/1	0.86	0.12	74,74,74,74	0
54	MG	2A	3062	1/1	0.86	0.30	50,50,50,50	0
54	MG	1A	3067	1/1	0.86	0.18	58,58,58,58	0
54	MG	1A	3519	1/1	0.86	0.15	46,46,46,46	0
54	MG	1A	3344	1/1	0.86	0.09	59,59,59,59	0
54	MG	1a	1612	1/1	0.86	0.13	67,67,67,67	0
54	MG	2A	3662	1/1	0.86	0.18	44,44,44,44	0
54	MG	1a	1618	1/1	0.86	0.12	63,63,63,63	0
54	MG	2A	3428	1/1	0.86	0.14	40,40,40,40	0
54	MG	1A	3528	1/1	0.86	0.09	42,42,42,42	0
54	MG	2A	3229	1/1	0.86	0.68	68,68,68,68	0
54	MG	1A	3395	1/1	0.86	0.14	52,52,52,52	0
54	MG	2A	3080	1/1	0.86	0.07	84,84,84,84	0
54	MG	1a	1870	1/1	0.86	0.17	69,69,69,69	0
54	MG	2A	3459	1/1	0.86	0.08	74,74,74,74	0
54	MG	2A	3707	1/1	0.86	0.12	68,68,68,68	0
54	MG	2A	3711	1/1	0.86	0.16	66,66,66,66	0
54	MG	1A	3533	1/1	0.86	0.11	59,59,59,59	0
54	MG	1A	3957	1/1	0.86	0.12	50,50,50,50	0
54	MG	2a	3086	1/1	0.86	0.29	64,64,64,64	0
54	MG	2A	3243	1/1	0.86	0.62	56,56,56,56	0
54	MG	2A	3245	1/1	0.86	0.18	64,64,64,64	0
54	MG	2A	3101	1/1	0.86	0.18	57,57,57,57	0
54	MG	1A	3635	1/1	0.86	0.22	29,29,29,29	0
54	MG	2A	3477	1/1	0.86	0.08	50,50,50,50	0
54	MG	1a	1876	1/1	0.86	0.11	63,63,63,63	0
54	MG	2A	3251	1/1	0.86	0.21	67,67,67,67	0
54	MG	1a	1638	1/1	0.86	0.09	51,51,51,51	0
54	MG	1a	1728	1/1	0.86	0.11	67,67,67,67	0
54	MG	2a	3112	1/1	0.86	0.19	75,75,75,75	0
54	MG	1A	3861	1/1	0.86	0.18	48,48,48,48	0
54	MG	1A	3195	1/1	0.86	0.26	68,68,68,68	0
54	MG	2A	3270	1/1	0.86	0.19	74,74,74,74	0
54	MG	2a	3146	1/1	0.86	0.14	65,65,65,65	0
54	MG	1A	3260	1/1	0.86	0.24	65,65,65,65	0
54	MG	1A	3222	1/1	0.86	0.16	65,65,65,65	0
54	MG	2A	3144	1/1	0.86	0.08	65,65,65,65	0
54	MG	1A	3568	1/1	0.86	0.17	59,59,59,59	0
54	MG	1A	3574	1/1	0.86	0.13	49,49,49,49	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3289	1/1	0.86	0.39	50,50,50,50	0
54	MG	2a	3177	1/1	0.86	0.10	76,76,76,76	0
54	MG	1F	316	1/1	0.86	0.14	62,62,62,62	0
54	MG	1A	3577	1/1	0.86	0.12	60,60,60,60	0
54	MG	2P	202	1/1	0.86	0.11	77,77,77,77	0
54	MG	1A	3987	1/1	0.86	0.10	74,74,74,74	0
54	MG	2A	3298	1/1	0.86	0.24	66,66,66,66	0
54	MG	2X	101	1/1	0.86	0.22	52,52,52,52	0
54	MG	2Y	201	1/1	0.86	0.28	71,71,71,71	0
54	MG	1A	3295	1/1	0.86	0.15	64,64,64,64	0
59	ZN	14	102	1/1	0.86	0.07	113,113,113,113	0
54	MG	2A	3253	1/1	0.87	0.23	69,69,69,69	0
54	MG	1a	1711	1/1	0.87	0.25	66,66,66,66	0
54	MG	1a	1714	1/1	0.87	0.11	73,73,73,73	0
54	MG	1A	3912	1/1	0.87	0.16	33,33,33,33	0
54	MG	2A	3464	1/1	0.87	0.13	61,61,61,61	0
54	MG	2A	3170	1/1	0.87	0.18	47,47,47,47	0
54	MG	2A	3667	1/1	0.87	0.14	53,53,53,53	0
54	MG	1A	3515	1/1	0.87	0.13	47,47,47,47	0
54	MG	2A	3271	1/1	0.87	0.26	70,70,70,70	0
54	MG	2A	3687	1/1	0.87	0.15	55,55,55,55	0
54	MG	1A	3232	1/1	0.87	0.28	40,40,40,40	0
54	MG	2A	3473	1/1	0.87	0.13	62,62,62,62	0
54	MG	2A	3695	1/1	0.87	0.17	69,69,69,69	0
54	MG	2A	3697	1/1	0.87	0.09	66,66,66,66	0
54	MG	1A	3803	1/1	0.87	0.10	59,59,59,59	0
54	MG	2A	3178	1/1	0.87	0.14	70,70,70,70	0
54	MG	2A	3180	1/1	0.87	0.13	76,76,76,76	0
54	MG	2A	3487	1/1	0.87	0.13	60,60,60,60	0
54	MG	2A	3281	1/1	0.87	0.35	74,74,74,74	0
54	MG	1A	3168	1/1	0.87	0.11	49,49,49,49	0
54	MG	2A	3048	1/1	0.87	0.13	58,58,58,58	0
54	MG	2A	3188	1/1	0.87	0.15	73,73,73,73	0
54	MG	1A	3820	1/1	0.87	0.20	65,65,65,65	0
54	MG	1A	3152	1/1	0.87	0.23	69,69,69,69	0
54	MG	1A	3047	1/1	0.87	0.36	68,68,68,68	0
54	MG	1A	3708	1/1	0.87	0.16	45,45,45,45	0
54	MG	2a	3074	1/1	0.87	0.11	65,65,65,65	0
54	MG	1A	3404	1/1	0.87	0.15	33,33,33,33	0
54	MG	1A	3627	1/1	0.87	0.22	49,49,49,49	0
54	MG	1A	3189	1/1	0.87	0.29	66,66,66,66	0
54	MG	10	108	1/1	0.87	0.14	60,60,60,60	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3468	1/1	0.87	0.18	66,66,66,66	0
54	MG	1A	3470	1/1	0.87	0.11	55,55,55,55	0
54	MG	1A	3092	1/1	0.87	0.09	50,50,50,50	0
54	MG	2B	214	1/1	0.87	0.16	72,72,72,72	0
54	MG	1A	3360	1/1	0.87	0.15	55,55,55,55	0
54	MG	1A	3762	1/1	0.87	0.21	41,41,41,41	0
54	MG	2a	3104	1/1	0.87	0.14	60,60,60,60	0
54	MG	1a	1795	1/1	0.87	0.09	74,74,74,74	0
54	MG	1A	3430	1/1	0.87	0.17	38,38,38,38	0
54	MG	1A	3008	1/1	0.87	0.20	48,48,48,48	0
54	MG	2a	3113	1/1	0.87	0.08	77,77,77,77	0
54	MG	2a	3114	1/1	0.87	0.12	62,62,62,62	0
54	MG	2A	3603	1/1	0.87	0.10	62,62,62,62	0
54	MG	2a	3120	1/1	0.87	0.15	65,65,65,65	0
54	MG	1A	3970	1/1	0.87	0.11	53,53,53,53	0
54	MG	1A	3073	1/1	0.87	0.24	50,50,50,50	0
54	MG	1A	3377	1/1	0.87	0.19	38,38,38,38	0
54	MG	2A	3618	1/1	0.87	0.10	60,60,60,60	0
54	MG	2A	3233	1/1	0.87	0.28	66,66,66,66	0
54	MG	2A	3622	1/1	0.87	0.11	62,62,62,62	0
54	MG	1a	1810	1/1	0.87	0.14	65,65,65,65	0
54	MG	1A	3386	1/1	0.87	0.26	37,37,37,37	0
54	MG	2A	3001	1/1	0.87	0.12	57,57,57,57	0
54	MG	1A	3676	1/1	0.87	0.14	68,68,68,68	0
54	MG	27	103	1/1	0.87	0.12	68,68,68,68	0
54	MG	1A	3223	1/1	0.87	0.20	57,57,57,57	0
54	MG	2A	3422	1/1	0.87	0.14	52,52,52,52	0
54	MG	2A	3022	1/1	0.87	0.24	67,67,67,67	0
54	MG	2a	3004	1/1	0.87	0.13	58,58,58,58	0
54	MG	1A	3509	1/1	0.87	0.14	44,44,44,44	0
54	MG	2A	3432	1/1	0.87	0.17	56,56,56,56	0
54	MG	2A	3025	1/1	0.87	0.37	58,58,58,58	0
54	MG	1a	1818	1/1	0.87	0.07	69,69,69,69	0
54	MG	1A	3549	1/1	0.88	0.11	57,57,57,57	0
54	MG	2A	3224	1/1	0.88	0.22	63,63,63,63	0
54	MG	2D	302	1/1	0.88	0.20	57,57,57,57	0
54	MG	2A	3225	1/1	0.88	0.25	53,53,53,53	0
54	MG	2E	302	1/1	0.88	0.43	52,52,52,52	0
54	MG	1D	309	1/1	0.88	0.11	47,47,47,47	0
54	MG	1A	3743	1/1	0.88	0.12	67,67,67,67	0
54	MG	2A	3231	1/1	0.88	0.24	62,62,62,62	0
54	MG	1a	1805	1/1	0.88	0.07	81,81,81,81	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1D	319	1/1	0.88	0.41	61,61,61,61	0
54	MG	2A	3058	1/1	0.88	0.20	59,59,59,59	0
54	MG	2A	3490	1/1	0.88	0.27	65,65,65,65	0
54	MG	1a	1665	1/1	0.88	0.33	72,72,72,72	0
54	MG	2R	202	1/1	0.88	0.21	53,53,53,53	0
54	MG	1A	3639	1/1	0.88	0.11	67,67,67,67	0
54	MG	2T	202	1/1	0.88	0.12	77,77,77,77	0
54	MG	1A	3647	1/1	0.88	0.12	75,75,75,75	0
54	MG	1A	3857	1/1	0.88	0.11	47,47,47,47	0
54	MG	1a	1677	1/1	0.88	0.15	65,65,65,65	0
54	MG	1A	3961	1/1	0.88	0.09	48,48,48,48	0
54	MG	2A	3519	1/1	0.88	0.16	64,64,64,64	0
54	MG	1A	3967	1/1	0.88	0.17	77,77,77,77	0
54	MG	2A	3526	1/1	0.88	0.16	44,44,44,44	0
54	MG	2A	3529	1/1	0.88	0.13	60,60,60,60	0
54	MG	1G	203	1/1	0.88	0.12	60,60,60,60	0
54	MG	1a	1682	1/1	0.88	0.40	66,66,66,66	0
54	MG	1A	3653	1/1	0.88	0.07	66,66,66,66	0
54	MG	2A	3541	1/1	0.88	0.15	73,73,73,73	0
54	MG	2a	3006	1/1	0.88	0.21	78,78,78,78	0
54	MG	2A	3263	1/1	0.88	0.25	79,79,79,79	0
54	MG	1A	3554	1/1	0.88	0.13	58,58,58,58	0
54	MG	1a	1687	1/1	0.88	0.09	60,60,60,60	0
54	MG	1N	204	1/1	0.88	0.34	59,59,59,59	0
54	MG	1A	3077	1/1	0.88	0.54	56,56,56,56	0
54	MG	2A	3572	1/1	0.88	0.11	63,63,63,63	0
54	MG	2A	3573	1/1	0.88	0.10	67,67,67,67	0
54	MG	2A	3108	1/1	0.88	0.32	67,67,67,67	0
54	MG	2A	3272	1/1	0.88	0.07	65,65,65,65	0
54	MG	1a	1850	1/1	0.88	0.29	75,75,75,75	0
54	MG	1A	3870	1/1	0.88	0.08	66,66,66,66	0
54	MG	1A	3282	1/1	0.88	0.21	56,56,56,56	0
54	MG	2A	3278	1/1	0.88	0.16	63,63,63,63	0
54	MG	2A	3121	1/1	0.88	0.10	43,43,43,43	0
54	MG	1A	3880	1/1	0.88	0.18	42,42,42,42	0
54	MG	1a	1860	1/1	0.88	0.09	59,59,59,59	0
54	MG	1A	3228	1/1	0.88	0.16	45,45,45,45	0
54	MG	2A	3290	1/1	0.88	0.24	87,87,87,87	0
54	MG	1A	3329	1/1	0.88	0.20	44,44,44,44	0
54	MG	2a	3048	1/1	0.88	0.13	75,75,75,75	0
54	MG	2A	3141	1/1	0.88	0.20	58,58,58,58	0
54	MG	1A	3990	1/1	0.88	0.10	55,55,55,55	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3331	1/1	0.88	0.24	54,54,54,54	0
54	MG	1Y	201	1/1	0.88	0.26	56,56,56,56	0
54	MG	1a	1877	1/1	0.88	0.20	58,58,58,58	0
54	MG	2A	3312	1/1	0.88	0.30	65,65,65,65	0
54	MG	2A	3640	1/1	0.88	0.28	62,62,62,62	0
54	MG	1A	3780	1/1	0.88	0.14	38,38,38,38	0
54	MG	1A	3893	1/1	0.88	0.26	48,48,48,48	0
54	MG	2A	3326	1/1	0.88	0.11	67,67,67,67	0
54	MG	2A	3649	1/1	0.88	0.14	67,67,67,67	0
54	MG	2A	3163	1/1	0.88	0.25	84,84,84,84	0
54	MG	2a	3080	1/1	0.88	0.10	73,73,73,73	0
54	MG	1a	1716	1/1	0.88	0.26	68,68,68,68	0
54	MG	2a	3084	1/1	0.88	0.28	68,68,68,68	0
54	MG	2A	3343	1/1	0.88	0.13	44,44,44,44	0
54	MG	2A	3345	1/1	0.88	0.12	81,81,81,81	0
54	MG	11	103	1/1	0.88	0.14	49,49,49,49	0
54	MG	1d	302	1/1	0.88	0.12	77,77,77,77	0
54	MG	2a	3090	1/1	0.88	0.11	64,64,64,64	0
54	MG	1A	3585	1/1	0.88	0.27	50,50,50,50	0
54	MG	1A	4007	1/1	0.88	0.07	59,59,59,59	0
54	MG	1A	3907	1/1	0.88	0.09	63,63,63,63	0
54	MG	2a	3096	1/1	0.88	0.20	76,76,76,76	0
54	MG	2a	3098	1/1	0.88	0.13	72,72,72,72	0
54	MG	1A	3589	1/1	0.88	0.10	61,61,61,61	0
54	MG	2A	3681	1/1	0.88	0.16	56,56,56,56	0
54	MG	2a	3106	1/1	0.88	0.31	67,67,67,67	0
54	MG	2A	3182	1/1	0.88	0.10	61,61,61,61	0
54	MG	1A	3030	1/1	0.88	0.15	38,38,38,38	0
54	MG	1A	3090	1/1	0.88	0.42	44,44,44,44	0
54	MG	2A	3186	1/1	0.88	0.23	67,67,67,67	0
54	MG	1a	1730	1/1	0.88	0.16	63,63,63,63	0
54	MG	1A	3797	1/1	0.88	0.12	38,38,38,38	0
54	MG	1A	3060	1/1	0.88	0.11	54,54,54,54	0
54	MG	1B	206	1/1	0.88	0.30	61,61,61,61	0
54	MG	2a	3129	1/1	0.88	0.14	82,82,82,82	0
54	MG	1B	210	1/1	0.88	0.27	70,70,70,70	0
54	MG	1A	3245	1/1	0.88	0.30	64,64,64,64	0
54	MG	2A	3201	1/1	0.88	0.08	58,58,58,58	0
54	MG	1A	3093	1/1	0.88	0.24	46,46,46,46	0
54	MG	1A	3041	1/1	0.88	0.21	58,58,58,58	0
54	MG	1A	3413	1/1	0.88	0.12	54,54,54,54	0
54	MG	1A	3308	1/1	0.88	0.21	47,47,47,47	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2a	3173	1/1	0.88	0.13	69,69,69,69	0
54	MG	1a	1783	1/1	0.88	0.11	74,74,74,74	0
54	MG	2A	3211	1/1	0.88	0.26	59,59,59,59	0
54	MG	2A	3450	1/1	0.88	0.19	53,53,53,53	0
54	MG	2A	3040	1/1	0.88	0.15	52,52,52,52	0
54	MG	1A	3479	1/1	0.88	0.17	42,42,42,42	0
54	MG	1A	3716	1/1	0.88	0.34	60,60,60,60	0
54	MG	1A	3262	1/1	0.88	0.32	53,53,53,53	0
54	MG	2a	3188	1/1	0.88	0.10	73,73,73,73	0
54	MG	2B	206	1/1	0.88	0.17	73,73,73,73	0
54	MG	2o	101	1/1	0.88	0.08	70,70,70,70	0
54	MG	2B	207	1/1	0.88	0.22	72,72,72,72	0
57	MPD	2A	3732	8/8	0.88	0.26	50,56,61,64	0
54	MG	2B	208	1/1	0.88	0.12	73,73,73,73	0
54	MG	1A	3276	1/1	0.88	0.17	55,55,55,55	0
54	MG	1D	317	1/1	0.89	0.29	68,68,68,68	0
54	MG	1A	3256	1/1	0.89	0.49	51,51,51,51	0
54	MG	2A	3333	1/1	0.89	0.14	60,60,60,60	0
54	MG	1A	3364	1/1	0.89	0.10	52,52,52,52	0
54	MG	1E	308	1/1	0.89	0.11	33,33,33,33	0
54	MG	1A	3978	1/1	0.89	0.12	61,61,61,61	0
54	MG	1a	1788	1/1	0.89	0.43	74,74,74,74	0
54	MG	2a	3008	1/1	0.89	0.16	60,60,60,60	0
54	MG	2A	3352	1/1	0.89	0.14	45,45,45,45	0
54	MG	1a	1790	1/1	0.89	0.17	74,74,74,74	0
54	MG	2A	3358	1/1	0.89	0.12	60,60,60,60	0
54	MG	1F	313	1/1	0.89	0.09	49,49,49,49	0
54	MG	1A	3219	1/1	0.89	0.21	46,46,46,46	0
54	MG	1A	3876	1/1	0.89	0.15	35,35,35,35	0
54	MG	1a	1668	1/1	0.89	0.18	60,60,60,60	0
54	MG	2a	3023	1/1	0.89	0.14	58,58,58,58	0
54	MG	2A	3384	1/1	0.89	0.13	46,46,46,46	0
54	MG	1A	3010	1/1	0.89	0.17	56,56,56,56	0
54	MG	2a	3026	1/1	0.89	0.21	79,79,79,79	0
54	MG	1A	3375	1/1	0.89	0.13	49,49,49,49	0
54	MG	1A	3471	1/1	0.89	0.11	57,57,57,57	0
54	MG	1a	1808	1/1	0.89	0.08	86,86,86,86	0
54	MG	1A	3778	1/1	0.89	0.21	76,76,76,76	0
54	MG	1N	203	1/1	0.89	0.20	55,55,55,55	0
54	MG	1A	3603	1/1	0.89	0.13	61,61,61,61	0
54	MG	2A	3656	1/1	0.89	0.13	53,53,53,53	0
54	MG	1A	3423	1/1	0.89	0.15	35,35,35,35	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3608	1/1	0.89	0.17	67,67,67,67	0
54	MG	1A	3690	1/1	0.89	0.05	60,60,60,60	0
54	MG	1A	3071	1/1	0.89	0.57	40,40,40,40	0
54	MG	1A	3614	1/1	0.89	0.22	50,50,50,50	0
54	MG	1A	3380	1/1	0.89	0.20	29,29,29,29	0
54	MG	2A	3680	1/1	0.89	0.22	65,65,65,65	0
54	MG	1A	3698	1/1	0.89	0.13	49,49,49,49	0
54	MG	1a	1828	1/1	0.89	0.08	70,70,70,70	0
54	MG	2A	3689	1/1	0.89	0.47	57,57,57,57	0
54	MG	1A	3809	1/1	0.89	0.18	63,63,63,63	0
54	MG	1A	3928	1/1	0.89	0.06	65,65,65,65	0
54	MG	1a	1841	1/1	0.89	0.10	66,66,66,66	0
54	MG	2A	3083	1/1	0.89	0.54	62,62,62,62	0
54	MG	1A	3487	1/1	0.89	0.16	57,57,57,57	0
54	MG	2A	3092	1/1	0.89	0.15	66,66,66,66	0
54	MG	1A	3707	1/1	0.89	0.16	71,71,71,71	0
54	MG	1A	3939	1/1	0.89	0.05	55,55,55,55	0
54	MG	1A	3382	1/1	0.89	0.26	66,66,66,66	0
54	MG	15	105	1/1	0.89	0.28	32,32,32,32	0
54	MG	1A	3084	1/1	0.89	0.18	59,59,59,59	0
54	MG	1A	3550	1/1	0.89	0.09	62,62,62,62	0
54	MG	2A	3474	1/1	0.89	0.17	42,42,42,42	0
54	MG	1A	3301	1/1	0.89	0.13	47,47,47,47	0
54	MG	2A	3252	1/1	0.89	0.12	61,61,61,61	0
54	MG	2A	3112	1/1	0.89	0.29	65,65,65,65	0
54	MG	2A	3114	1/1	0.89	0.13	65,65,65,65	0
54	MG	2A	3728	1/1	0.89	0.17	69,69,69,69	0
54	MG	2a	3099	1/1	0.89	0.14	64,64,64,64	0
54	MG	1a	1867	1/1	0.89	0.13	59,59,59,59	0
54	MG	2A	3119	1/1	0.89	0.17	54,54,54,54	0
54	MG	2a	3105	1/1	0.89	0.37	67,67,67,67	0
54	MG	1A	3720	1/1	0.89	0.18	58,58,58,58	0
54	MG	1B	219	1/1	0.89	0.20	40,40,40,40	0
54	MG	2A	3500	1/1	0.89	0.23	71,71,71,71	0
54	MG	1B	220	1/1	0.89	0.23	57,57,57,57	0
54	MG	1A	3722	1/1	0.89	0.09	44,44,44,44	0
54	MG	1A	3147	1/1	0.89	0.22	58,58,58,58	0
54	MG	2A	3139	1/1	0.89	0.26	65,65,65,65	0
54	MG	1A	3208	1/1	0.89	0.34	67,67,67,67	0
54	MG	1a	1631	1/1	0.89	0.21	55,55,55,55	0
54	MG	2D	306	1/1	0.89	0.27	61,61,61,61	0
54	MG	2A	3145	1/1	0.89	0.11	69,69,69,69	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3737	1/1	0.89	0.28	48,48,48,48	0
54	MG	1a	1634	1/1	0.89	0.12	43,43,43,43	0
54	MG	2a	3155	1/1	0.89	0.21	70,70,70,70	0
54	MG	2a	3160	1/1	0.89	0.09	75,75,75,75	0
54	MG	2A	3282	1/1	0.89	0.30	70,70,70,70	0
54	MG	1A	3110	1/1	0.89	0.22	61,61,61,61	0
54	MG	1A	3151	1/1	0.89	0.17	48,48,48,48	0
54	MG	1a	1746	1/1	0.89	0.45	81,81,81,81	0
54	MG	1a	1750	1/1	0.89	0.05	68,68,68,68	0
54	MG	2A	3553	1/1	0.89	0.27	71,71,71,71	0
54	MG	2A	3558	1/1	0.89	0.11	51,51,51,51	0
54	MG	1g	202	1/1	0.89	0.08	63,63,63,63	0
54	MG	2A	3169	1/1	0.89	0.26	61,61,61,61	0
54	MG	1a	1753	1/1	0.89	0.14	64,64,64,64	0
54	MG	1A	3513	1/1	0.89	0.13	63,63,63,63	0
54	MG	1A	3659	1/1	0.89	0.34	40,40,40,40	0
54	MG	1A	3965	1/1	0.89	0.16	62,62,62,62	0
54	MG	2a	3192	1/1	0.89	0.15	62,62,62,62	0
54	MG	2A	3313	1/1	0.89	0.18	74,74,74,74	0
54	MG	2k	201	1/1	0.89	0.14	63,63,63,63	0
54	MG	2A	3314	1/1	0.89	0.35	61,61,61,61	0
54	MG	21	101	1/1	0.89	0.24	73,73,73,73	0
54	MG	1a	1646	1/1	0.89	0.19	70,70,70,70	0
57	MPD	2B	217	8/8	0.89	0.21	61,68,76,77	0
54	MG	1a	1774	1/1	0.89	0.12	66,66,66,66	0
54	MG	28	101	1/1	0.89	0.24	68,68,68,68	0
59	ZN	2Y	202	1/1	0.89	0.17	92,92,92,92	0
54	MG	1A	3652	1/1	0.90	0.78	47,47,47,47	0
54	MG	2A	3157	1/1	0.90	0.10	60,60,60,60	0
54	MG	1A	3846	1/1	0.90	0.16	47,47,47,47	0
54	MG	2A	3581	1/1	0.90	0.07	66,66,66,66	0
54	MG	1A	3738	1/1	0.90	0.25	70,70,70,70	0
54	MG	1k	201	1/1	0.90	0.14	57,57,57,57	0
54	MG	2A	3585	1/1	0.90	0.11	68,68,68,68	0
54	MG	2A	3595	1/1	0.90	0.42	72,72,72,72	0
54	MG	1n	101	1/1	0.90	0.11	63,63,63,63	0
54	MG	1D	305	1/1	0.90	0.13	58,58,58,58	0
54	MG	2A	3324	1/1	0.90	0.30	69,69,69,69	0
54	MG	1a	1765	1/1	0.90	0.14	70,70,70,70	0
54	MG	1a	1767	1/1	0.90	0.14	61,61,61,61	0
54	MG	1A	3080	1/1	0.90	0.24	50,50,50,50	0
54	MG	1a	1644	1/1	0.90	0.10	64,64,64,64	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3335	1/1	0.90	0.23	70,70,70,70	0
54	MG	1A	3506	1/1	0.90	0.17	63,63,63,63	0
54	MG	1A	3124	1/1	0.90	0.13	37,37,37,37	0
54	MG	1A	3962	1/1	0.90	0.17	65,65,65,65	0
54	MG	1A	3284	1/1	0.90	0.13	44,44,44,44	0
54	MG	1E	306	1/1	0.90	0.16	54,54,54,54	0
54	MG	1A	3212	1/1	0.90	0.27	42,42,42,42	0
54	MG	1A	3868	1/1	0.90	0.21	49,49,49,49	0
54	MG	2A	3037	1/1	0.90	0.14	49,49,49,49	0
54	MG	2A	3639	1/1	0.90	0.09	54,54,54,54	0
54	MG	1A	3038	1/1	0.90	0.20	58,58,58,58	0
54	MG	2A	3370	1/1	0.90	0.17	55,55,55,55	0
54	MG	1A	3290	1/1	0.90	0.47	54,54,54,54	0
54	MG	1A	3408	1/1	0.90	0.19	37,37,37,37	0
54	MG	1A	3602	1/1	0.90	0.23	50,50,50,50	0
54	MG	2a	3043	1/1	0.90	0.27	66,66,66,66	0
54	MG	2A	3044	1/1	0.90	0.24	59,59,59,59	0
54	MG	1A	3371	1/1	0.90	0.09	48,48,48,48	0
54	MG	1A	3776	1/1	0.90	0.18	57,57,57,57	0
54	MG	1A	3246	1/1	0.90	0.29	59,59,59,59	0
54	MG	1A	3779	1/1	0.90	0.26	55,55,55,55	0
54	MG	1A	3108	1/1	0.90	0.24	43,43,43,43	0
54	MG	1A	3424	1/1	0.90	0.24	78,78,78,78	0
54	MG	1A	3902	1/1	0.90	0.13	58,58,58,58	0
54	MG	2A	3404	1/1	0.90	0.15	56,56,56,56	0
54	MG	2A	3057	1/1	0.90	0.18	52,52,52,52	0
54	MG	2A	3673	1/1	0.90	0.12	52,52,52,52	0
54	MG	1A	3999	1/1	0.90	0.12	64,64,64,64	0
54	MG	2a	3073	1/1	0.90	0.08	71,71,71,71	0
54	MG	1A	3611	1/1	0.90	0.19	64,64,64,64	0
54	MG	1R	204	1/1	0.90	0.20	43,43,43,43	0
54	MG	1A	4003	1/1	0.90	0.36	42,42,42,42	0
54	MG	1A	3909	1/1	0.90	0.10	58,58,58,58	0
54	MG	2A	3226	1/1	0.90	0.26	42,42,42,42	0
54	MG	2A	3068	1/1	0.90	0.39	64,64,64,64	0
54	MG	2A	3694	1/1	0.90	0.30	58,58,58,58	0
54	MG	1A	3612	1/1	0.90	0.14	56,56,56,56	0
54	MG	1a	1694	1/1	0.90	0.41	72,72,72,72	0
54	MG	2A	3452	1/1	0.90	0.16	39,39,39,39	0
54	MG	2A	3453	1/1	0.90	0.18	73,73,73,73	0
54	MG	2a	3093	1/1	0.90	0.14	67,67,67,67	0
54	MG	2A	3074	1/1	0.90	0.48	54,54,54,54	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3075	1/1	0.90	0.49	55,55,55,55	0
54	MG	2A	3708	1/1	0.90	0.12	43,43,43,43	0
54	MG	1A	4008	1/1	0.90	0.12	64,64,64,64	0
54	MG	1a	1697	1/1	0.90	0.17	52,52,52,52	0
54	MG	1A	3613	1/1	0.90	0.09	52,52,52,52	0
54	MG	1a	1832	1/1	0.90	0.07	70,70,70,70	0
54	MG	1A	3478	1/1	0.90	0.16	50,50,50,50	0
54	MG	1A	3142	1/1	0.90	0.14	41,41,41,41	0
54	MG	1A	3335	1/1	0.90	0.42	62,62,62,62	0
54	MG	1A	3200	1/1	0.90	0.38	44,44,44,44	0
54	MG	1A	3629	1/1	0.90	0.38	58,58,58,58	0
54	MG	1A	3493	1/1	0.90	0.14	31,31,31,31	0
54	MG	2A	3478	1/1	0.90	0.08	64,64,64,64	0
54	MG	1a	1852	1/1	0.90	0.12	75,75,75,75	0
54	MG	2B	203	1/1	0.90	0.27	74,74,74,74	0
54	MG	2a	3125	1/1	0.90	0.10	89,89,89,89	0
54	MG	1a	1712	1/1	0.90	0.15	73,73,73,73	0
54	MG	2A	3258	1/1	0.90	0.19	34,34,34,34	0
54	MG	1B	207	1/1	0.90	0.40	63,63,63,63	0
54	MG	1a	1715	1/1	0.90	0.17	75,75,75,75	0
54	MG	2a	3148	1/1	0.90	0.29	78,78,78,78	0
54	MG	17	106	1/1	0.90	0.17	50,50,50,50	0
54	MG	1a	1602	1/1	0.90	0.06	79,79,79,79	0
54	MG	2a	3158	1/1	0.90	0.17	69,69,69,69	0
54	MG	1A	3937	1/1	0.90	0.19	68,68,68,68	0
54	MG	2B	212	1/1	0.90	0.24	69,69,69,69	0
54	MG	2A	3120	1/1	0.90	0.15	50,50,50,50	0
54	MG	1A	3227	1/1	0.90	0.18	46,46,46,46	0
54	MG	2A	3513	1/1	0.90	0.18	55,55,55,55	0
54	MG	1A	3440	1/1	0.90	0.33	43,43,43,43	0
54	MG	2A	3518	1/1	0.90	0.09	58,58,58,58	0
54	MG	1a	1875	1/1	0.90	0.06	56,56,56,56	0
54	MG	2A	3521	1/1	0.90	0.14	47,47,47,47	0
54	MG	2A	3127	1/1	0.90	0.26	53,53,53,53	0
54	MG	1a	1615	1/1	0.90	0.09	63,63,63,63	0
54	MG	2A	3133	1/1	0.90	0.23	67,67,67,67	0
54	MG	1A	3095	1/1	0.90	0.18	47,47,47,47	0
54	MG	1A	3641	1/1	0.90	0.23	28,28,28,28	0
54	MG	2A	3284	1/1	0.90	0.12	68,68,68,68	0
54	MG	2A	3540	1/1	0.90	0.20	41,41,41,41	0
54	MG	1A	3393	1/1	0.90	0.21	59,59,59,59	0
54	MG	1A	3841	1/1	0.90	0.24	41,41,41,41	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
57	MPD	1A	4024	8/8	0.90	0.18	50,57,60,63	0
54	MG	2A	3548	1/1	0.90	0.13	70,70,70,70	0
54	MG	1a	1743	1/1	0.90	0.11	62,62,62,62	0
54	MG	1A	3948	1/1	0.90	0.14	30,30,30,30	0
54	MG	1A	3729	1/1	0.90	0.12	50,50,50,50	0
54	MG	1A	3650	1/1	0.90	0.13	54,54,54,54	0
54	MG	2A	3297	1/1	0.90	0.29	61,61,61,61	0
54	MG	2A	3542	1/1	0.91	0.25	66,66,66,66	0
54	MG	2T	203	1/1	0.91	0.11	71,71,71,71	0
54	MG	1A	3399	1/1	0.91	0.15	58,58,58,58	0
54	MG	1A	3605	1/1	0.91	0.20	61,61,61,61	0
54	MG	1A	3489	1/1	0.91	0.21	53,53,53,53	0
54	MG	1A	3032	1/1	0.91	0.12	65,65,65,65	0
54	MG	1a	1678	1/1	0.91	0.13	55,55,55,55	0
54	MG	1B	203	1/1	0.91	0.38	61,61,61,61	0
54	MG	2A	3164	1/1	0.91	0.36	70,70,70,70	0
54	MG	2A	3308	1/1	0.91	0.36	68,68,68,68	0
54	MG	1A	3667	1/1	0.91	0.41	55,55,55,55	0
54	MG	1a	1787	1/1	0.91	0.07	71,71,71,71	0
54	MG	2A	3580	1/1	0.91	0.14	65,65,65,65	0
54	MG	2A	3002	1/1	0.91	0.08	56,56,56,56	0
54	MG	2A	3582	1/1	0.91	0.08	64,64,64,64	0
54	MG	2A	3315	1/1	0.91	0.19	73,73,73,73	0
54	MG	1A	3169	1/1	0.91	0.12	32,32,32,32	0
54	MG	2A	3322	1/1	0.91	0.20	68,68,68,68	0
54	MG	2A	3587	1/1	0.91	0.19	48,48,48,48	0
54	MG	1A	3450	1/1	0.91	0.33	63,63,63,63	0
54	MG	2A	3175	1/1	0.91	0.17	48,48,48,48	0
54	MG	1A	3945	1/1	0.91	0.20	69,69,69,69	0
54	MG	1a	1793	1/1	0.91	0.23	68,68,68,68	0
54	MG	1a	1685	1/1	0.91	0.26	75,75,75,75	0
54	MG	2A	3181	1/1	0.91	0.18	69,69,69,69	0
54	MG	1A	3764	1/1	0.91	0.41	67,67,67,67	0
54	MG	2A	3616	1/1	0.91	0.12	65,65,65,65	0
54	MG	1A	3064	1/1	0.91	0.08	42,42,42,42	0
54	MG	1a	1688	1/1	0.91	0.11	56,56,56,56	0
54	MG	11	105	1/1	0.91	0.14	44,44,44,44	0
54	MG	2A	3351	1/1	0.91	0.15	46,46,46,46	0
54	MG	1A	3337	1/1	0.91	0.13	68,68,68,68	0
54	MG	1a	1691	1/1	0.91	0.11	58,58,58,58	0
54	MG	1A	3677	1/1	0.91	0.21	30,30,30,30	0
54	MG	2a	3036	1/1	0.91	0.14	46,46,46,46	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3192	1/1	0.91	0.24	71,71,71,71	0
54	MG	1a	1693	1/1	0.91	0.45	74,74,74,74	0
54	MG	1A	3955	1/1	0.91	0.14	35,35,35,35	0
54	MG	2A	3371	1/1	0.91	0.18	39,39,39,39	0
54	MG	2A	3196	1/1	0.91	0.20	57,57,57,57	0
54	MG	1a	1695	1/1	0.91	0.13	68,68,68,68	0
54	MG	1A	3379	1/1	0.91	0.20	52,52,52,52	0
54	MG	2a	3050	1/1	0.91	0.09	76,76,76,76	0
54	MG	18	101	1/1	0.91	0.31	49,49,49,49	0
54	MG	2a	3052	1/1	0.91	0.23	67,67,67,67	0
54	MG	2A	3389	1/1	0.91	0.12	41,41,41,41	0
54	MG	1a	1816	1/1	0.91	0.11	68,68,68,68	0
54	MG	2A	3206	1/1	0.91	0.20	64,64,64,64	0
54	MG	1A	3866	1/1	0.91	0.13	49,49,49,49	0
54	MG	1A	3563	1/1	0.91	0.13	63,63,63,63	0
54	MG	2A	3056	1/1	0.91	0.14	37,37,37,37	0
54	MG	2a	3062	1/1	0.91	0.10	76,76,76,76	0
54	MG	1a	1700	1/1	0.91	0.20	67,67,67,67	0
54	MG	2a	3065	1/1	0.91	0.12	70,70,70,70	0
54	MG	2a	3066	1/1	0.91	0.10	69,69,69,69	0
54	MG	1a	1821	1/1	0.91	0.05	65,65,65,65	0
54	MG	2a	3071	1/1	0.91	0.30	67,67,67,67	0
54	MG	1a	1825	1/1	0.91	0.09	67,67,67,67	0
54	MG	2A	3063	1/1	0.91	0.10	60,60,60,60	0
54	MG	1a	1605	1/1	0.91	0.24	72,72,72,72	0
54	MG	2A	3669	1/1	0.91	0.18	59,59,59,59	0
54	MG	2a	3078	1/1	0.91	0.19	63,63,63,63	0
54	MG	2A	3421	1/1	0.91	0.29	74,74,74,74	0
54	MG	2A	3219	1/1	0.91	0.11	61,61,61,61	0
54	MG	2a	3082	1/1	0.91	0.14	65,65,65,65	0
54	MG	2A	3423	1/1	0.91	0.11	80,80,80,80	0
54	MG	1A	3503	1/1	0.91	0.12	31,31,31,31	0
54	MG	1a	1705	1/1	0.91	0.09	78,78,78,78	0
54	MG	1a	1830	1/1	0.91	0.05	72,72,72,72	0
54	MG	2A	3069	1/1	0.91	0.31	44,44,44,44	0
54	MG	2A	3692	1/1	0.91	0.21	51,51,51,51	0
54	MG	1A	3251	1/1	0.91	0.19	51,51,51,51	0
54	MG	1a	1614	1/1	0.91	0.14	58,58,58,58	0
54	MG	1a	1838	1/1	0.91	0.09	67,67,67,67	0
54	MG	1A	3233	1/1	0.91	0.29	40,40,40,40	0
54	MG	1A	3692	1/1	0.91	0.16	71,71,71,71	0
54	MG	1a	1843	1/1	0.91	0.13	54,54,54,54	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3419	1/1	0.91	0.13	34,34,34,34	0
54	MG	1A	3782	1/1	0.91	0.07	49,49,49,49	0
54	MG	2A	3240	1/1	0.91	0.44	41,41,41,41	0
54	MG	1a	1849	1/1	0.91	0.17	63,63,63,63	0
54	MG	2A	3712	1/1	0.91	0.08	63,63,63,63	0
54	MG	2A	3089	1/1	0.91	0.28	72,72,72,72	0
54	MG	1A	3887	1/1	0.91	0.17	47,47,47,47	0
54	MG	2A	3246	1/1	0.91	0.26	49,49,49,49	0
54	MG	2A	3472	1/1	0.91	0.10	68,68,68,68	0
54	MG	2A	3720	1/1	0.91	0.12	57,57,57,57	0
54	MG	1A	3783	1/1	0.91	0.19	33,33,33,33	0
54	MG	1A	3631	1/1	0.91	0.51	52,52,52,52	0
54	MG	2A	3475	1/1	0.91	0.11	64,64,64,64	0
54	MG	2a	3127	1/1	0.91	0.12	58,58,58,58	0
54	MG	2A	3098	1/1	0.91	0.19	52,52,52,52	0
54	MG	2A	3727	1/1	0.91	0.21	62,62,62,62	0
54	MG	2a	3131	1/1	0.91	0.13	64,64,64,64	0
54	MG	2a	3143	1/1	0.91	0.08	70,70,70,70	0
54	MG	1D	320	1/1	0.91	0.17	52,52,52,52	0
54	MG	1A	3511	1/1	0.91	0.12	59,59,59,59	0
54	MG	2A	3479	1/1	0.91	0.15	55,55,55,55	0
54	MG	2A	3107	1/1	0.91	0.27	57,57,57,57	0
54	MG	1A	3258	1/1	0.91	0.16	48,48,48,48	0
54	MG	2a	3157	1/1	0.91	0.14	70,70,70,70	0
54	MG	1a	1865	1/1	0.91	0.21	76,76,76,76	0
54	MG	2A	3259	1/1	0.91	0.28	64,64,64,64	0
54	MG	1A	3897	1/1	0.91	0.55	47,47,47,47	0
54	MG	1a	1726	1/1	0.91	0.26	68,68,68,68	0
54	MG	1A	3089	1/1	0.91	0.17	45,45,45,45	0
54	MG	1A	3426	1/1	0.91	0.08	43,43,43,43	0
54	MG	1a	1739	1/1	0.91	0.06	74,74,74,74	0
54	MG	2a	3174	1/1	0.91	0.14	64,64,64,64	0
54	MG	2B	213	1/1	0.91	0.19	72,72,72,72	0
54	MG	1a	1741	1/1	0.91	0.14	75,75,75,75	0
54	MG	2B	216	1/1	0.91	0.17	59,59,59,59	0
54	MG	1A	3645	1/1	0.91	0.18	43,43,43,43	0
54	MG	1A	3594	1/1	0.91	0.23	59,59,59,59	0
54	MG	1A	3324	1/1	0.91	0.52	49,49,49,49	0
54	MG	1A	3235	1/1	0.91	0.26	36,36,36,36	0
54	MG	2E	306	1/1	0.91	0.17	37,37,37,37	0
54	MG	2a	3189	1/1	0.91	0.21	69,69,69,69	0
54	MG	2A	3277	1/1	0.91	0.19	61,61,61,61	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3261	1/1	0.91	0.19	71,71,71,71	0
54	MG	1b	301	1/1	0.91	0.12	78,78,78,78	0
54	MG	1A	4002	1/1	0.91	0.17	62,62,62,62	0
54	MG	2A	3531	1/1	0.91	0.19	71,71,71,71	0
54	MG	1A	3824	1/1	0.91	0.13	47,47,47,47	0
54	MG	1A	3655	1/1	0.91	0.39	45,45,45,45	0
54	MG	1A	3929	1/1	0.91	0.14	55,55,55,55	0
54	MG	2Q	202	1/1	0.91	0.31	63,63,63,63	0
54	MG	1A	3241	1/1	0.91	0.28	39,39,39,39	0
54	MG	1A	3657	1/1	0.91	0.23	69,69,69,69	0
59	ZN	29	501	1/1	0.91	0.13	70,70,70,70	0
54	MG	1A	3694	1/1	0.92	0.10	79,79,79,79	0
54	MG	1A	3799	1/1	0.92	0.15	65,65,65,65	0
54	MG	2B	215	1/1	0.92	0.08	80,80,80,80	0
54	MG	1A	3802	1/1	0.92	0.32	60,60,60,60	0
54	MG	2A	3220	1/1	0.92	0.09	57,57,57,57	0
54	MG	1a	1645	1/1	0.92	0.11	62,62,62,62	0
54	MG	2D	308	1/1	0.92	0.27	45,45,45,45	0
54	MG	2A	3470	1/1	0.92	0.07	39,39,39,39	0
54	MG	1A	3633	1/1	0.92	0.12	73,73,73,73	0
54	MG	2A	3223	1/1	0.92	0.46	69,69,69,69	0
54	MG	1a	1789	1/1	0.92	0.19	55,55,55,55	0
54	MG	1A	3932	1/1	0.92	0.24	57,57,57,57	0
54	MG	1A	3804	1/1	0.92	0.15	60,60,60,60	0
54	MG	2A	3227	1/1	0.92	0.47	62,62,62,62	0
54	MG	2A	3052	1/1	0.92	0.08	54,54,54,54	0
54	MG	1A	3805	1/1	0.92	0.23	64,64,64,64	0
54	MG	2A	3483	1/1	0.92	0.14	52,52,52,52	0
54	MG	1A	3696	1/1	0.92	0.07	54,54,54,54	0
54	MG	1a	1658	1/1	0.92	0.48	51,51,51,51	0
54	MG	1A	3811	1/1	0.92	0.34	41,41,41,41	0
54	MG	1A	3368	1/1	0.92	0.15	62,62,62,62	0
54	MG	2A	3491	1/1	0.92	0.21	65,65,65,65	0
54	MG	2A	3494	1/1	0.92	0.17	74,74,74,74	0
54	MG	2A	3061	1/1	0.92	0.22	45,45,45,45	0
54	MG	1A	3160	1/1	0.92	0.26	37,37,37,37	0
54	MG	1a	1663	1/1	0.92	0.46	68,68,68,68	0
54	MG	1a	1806	1/1	0.92	0.06	73,73,73,73	0
54	MG	1a	1807	1/1	0.92	0.15	61,61,61,61	0
54	MG	1a	1664	1/1	0.92	0.12	77,77,77,77	0
54	MG	2A	3512	1/1	0.92	0.08	64,64,64,64	0
54	MG	1A	3704	1/1	0.92	0.18	61,61,61,61	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1D	316	1/1	0.92	0.24	68,68,68,68	0
54	MG	28	102	1/1	0.92	0.18	64,64,64,64	0
54	MG	2A	3517	1/1	0.92	0.19	69,69,69,69	0
54	MG	1A	3636	1/1	0.92	0.20	29,29,29,29	0
54	MG	1A	3583	1/1	0.92	0.16	22,22,22,22	0
54	MG	2A	3520	1/1	0.92	0.10	67,67,67,67	0
54	MG	1A	3947	1/1	0.92	0.12	45,45,45,45	0
54	MG	1A	3373	1/1	0.92	0.19	32,32,32,32	0
54	MG	1A	3833	1/1	0.92	0.19	36,36,36,36	0
54	MG	2A	3527	1/1	0.92	0.20	63,63,63,63	0
54	MG	2A	3078	1/1	0.92	0.28	64,64,64,64	0
54	MG	1A	3950	1/1	0.92	0.27	70,70,70,70	0
54	MG	1A	3586	1/1	0.92	0.24	43,43,43,43	0
54	MG	2A	3081	1/1	0.92	0.17	70,70,70,70	0
54	MG	2a	3017	1/1	0.92	0.08	67,67,67,67	0
54	MG	1F	305	1/1	0.92	0.17	40,40,40,40	0
54	MG	2A	3266	1/1	0.92	0.17	55,55,55,55	0
54	MG	1A	3836	1/1	0.92	0.15	58,58,58,58	0
54	MG	1F	314	1/1	0.92	0.12	54,54,54,54	0
54	MG	1A	3311	1/1	0.92	0.34	52,52,52,52	0
54	MG	1A	3442	1/1	0.92	0.20	32,32,32,32	0
54	MG	2A	3094	1/1	0.92	0.22	66,66,66,66	0
54	MG	1A	3483	1/1	0.92	0.10	60,60,60,60	0
54	MG	2A	3554	1/1	0.92	0.14	71,71,71,71	0
54	MG	1A	3596	1/1	0.92	0.33	60,60,60,60	0
54	MG	2A	3562	1/1	0.92	0.16	58,58,58,58	0
54	MG	2A	3564	1/1	0.92	0.13	74,74,74,74	0
54	MG	1A	3654	1/1	0.92	0.31	39,39,39,39	0
54	MG	1A	3520	1/1	0.92	0.20	27,27,27,27	0
54	MG	2A	3105	1/1	0.92	0.14	45,45,45,45	0
54	MG	1A	3848	1/1	0.92	0.13	60,60,60,60	0
54	MG	1A	3050	1/1	0.92	0.27	46,46,46,46	0
54	MG	1A	3523	1/1	0.92	0.07	56,56,56,56	0
54	MG	2a	3047	1/1	0.92	0.28	68,68,68,68	0
54	MG	2A	3287	1/1	0.92	0.10	65,65,65,65	0
54	MG	1A	3740	1/1	0.92	0.14	55,55,55,55	0
54	MG	1A	3975	1/1	0.92	0.15	56,56,56,56	0
54	MG	1a	1845	1/1	0.92	0.09	76,76,76,76	0
54	MG	1A	3859	1/1	0.92	0.13	69,69,69,69	0
54	MG	1Q	203	1/1	0.92	0.19	50,50,50,50	0
54	MG	2A	3588	1/1	0.92	0.13	61,61,61,61	0
54	MG	2A	3590	1/1	0.92	0.16	66,66,66,66	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3033	1/1	0.92	0.23	44,44,44,44	0
54	MG	1A	3100	1/1	0.92	0.15	52,52,52,52	0
54	MG	1A	3492	1/1	0.92	0.18	26,26,26,26	0
54	MG	2A	3599	1/1	0.92	0.25	62,62,62,62	0
54	MG	2a	3064	1/1	0.92	0.21	75,75,75,75	0
54	MG	2A	3601	1/1	0.92	0.18	50,50,50,50	0
54	MG	2A	3124	1/1	0.92	0.36	48,48,48,48	0
54	MG	2a	3067	1/1	0.92	0.08	76,76,76,76	0
54	MG	2A	3301	1/1	0.92	0.31	57,57,57,57	0
54	MG	1A	3325	1/1	0.92	0.14	51,51,51,51	0
54	MG	2A	3307	1/1	0.92	0.29	55,55,55,55	0
54	MG	1U	201	1/1	0.92	0.23	44,44,44,44	0
54	MG	2A	3617	1/1	0.92	0.08	65,65,65,65	0
54	MG	1A	3665	1/1	0.92	0.15	39,39,39,39	0
54	MG	1A	3249	1/1	0.92	0.44	54,54,54,54	0
54	MG	1a	1707	1/1	0.92	0.12	71,71,71,71	0
54	MG	1a	1708	1/1	0.92	0.34	62,62,62,62	0
54	MG	10	106	1/1	0.92	0.16	66,66,66,66	0
54	MG	2A	3320	1/1	0.92	0.15	49,49,49,49	0
54	MG	1A	3668	1/1	0.92	0.14	49,49,49,49	0
54	MG	1A	3052	1/1	0.92	0.57	51,51,51,51	0
54	MG	1a	1874	1/1	0.92	0.06	83,83,83,83	0
54	MG	1A	3879	1/1	0.92	0.11	51,51,51,51	0
54	MG	2A	3149	1/1	0.92	0.13	44,44,44,44	0
54	MG	2A	3328	1/1	0.92	0.36	67,67,67,67	0
54	MG	2A	3329	1/1	0.92	0.31	66,66,66,66	0
54	MG	2A	3331	1/1	0.92	0.07	67,67,67,67	0
54	MG	1A	3993	1/1	0.92	0.13	40,40,40,40	0
54	MG	1A	3458	1/1	0.92	0.22	62,62,62,62	0
54	MG	13	102	1/1	0.92	0.34	61,61,61,61	0
54	MG	2A	3339	1/1	0.92	0.14	50,50,50,50	0
54	MG	1A	3996	1/1	0.92	0.21	41,41,41,41	0
54	MG	1A	3252	1/1	0.92	0.60	44,44,44,44	0
54	MG	1A	3884	1/1	0.92	0.18	38,38,38,38	0
54	MG	1A	3011	1/1	0.92	0.10	52,52,52,52	0
54	MG	2A	3166	1/1	0.92	0.35	52,52,52,52	0
54	MG	2A	3355	1/1	0.92	0.11	42,42,42,42	0
54	MG	1a	1723	1/1	0.92	0.10	51,51,51,51	0
54	MG	2A	3357	1/1	0.92	0.08	59,59,59,59	0
54	MG	1d	304	1/1	0.92	0.13	86,86,86,86	0
54	MG	1e	201	1/1	0.92	0.11	72,72,72,72	0
54	MG	1e	203	1/1	0.92	0.26	61,61,61,61	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2a	3122	1/1	0.92	0.12	61,61,61,61	0
54	MG	2A	3679	1/1	0.92	0.10	75,75,75,75	0
54	MG	1A	3555	1/1	0.92	0.13	30,30,30,30	0
54	MG	1A	3888	1/1	0.92	0.19	32,32,32,32	0
54	MG	1A	3504	1/1	0.92	0.20	31,31,31,31	0
54	MG	2A	3377	1/1	0.92	0.12	47,47,47,47	0
54	MG	2a	3137	1/1	0.92	0.10	69,69,69,69	0
54	MG	2a	3138	1/1	0.92	0.27	80,80,80,80	0
54	MG	2a	3141	1/1	0.92	0.11	60,60,60,60	0
54	MG	2A	3380	1/1	0.92	0.17	37,37,37,37	0
54	MG	1A	3891	1/1	0.92	0.16	57,57,57,57	0
54	MG	1a	1737	1/1	0.92	0.06	60,60,60,60	0
54	MG	1A	3620	1/1	0.92	0.53	33,33,33,33	0
54	MG	1l	202	1/1	0.92	0.17	81,81,81,81	0
54	MG	2a	3152	1/1	0.92	0.09	72,72,72,72	0
54	MG	1A	3682	1/1	0.92	0.13	58,58,58,58	0
54	MG	1A	3684	1/1	0.92	0.27	52,52,52,52	0
54	MG	1A	3686	1/1	0.92	0.09	46,46,46,46	0
54	MG	2A	3189	1/1	0.92	0.28	58,58,58,58	0
54	MG	1a	1617	1/1	0.92	0.12	67,67,67,67	0
54	MG	2a	3163	1/1	0.92	0.19	52,52,52,52	0
54	MG	1A	3899	1/1	0.92	0.15	37,37,37,37	0
54	MG	1A	3394	1/1	0.92	0.14	39,39,39,39	0
54	MG	2A	3402	1/1	0.92	0.08	39,39,39,39	0
54	MG	2a	3172	1/1	0.92	0.19	76,76,76,76	0
54	MG	2A	3403	1/1	0.92	0.14	38,38,38,38	0
54	MG	1B	204	1/1	0.92	0.12	54,54,54,54	0
54	MG	2A	3194	1/1	0.92	0.35	68,68,68,68	0
54	MG	1A	3786	1/1	0.92	0.21	30,30,30,30	0
54	MG	1a	1629	1/1	0.92	0.13	65,65,65,65	0
54	MG	2A	3007	1/1	0.92	0.18	45,45,45,45	0
54	MG	1A	3787	1/1	0.92	0.14	60,60,60,60	0
54	MG	1A	3571	1/1	0.92	0.16	42,42,42,42	0
54	MG	2A	3204	1/1	0.92	0.13	60,60,60,60	0
54	MG	2A	3430	1/1	0.92	0.13	62,62,62,62	0
54	MG	2A	3024	1/1	0.92	0.11	51,51,51,51	0
54	MG	1A	3573	1/1	0.92	0.14	67,67,67,67	0
54	MG	2e	201	1/1	0.92	0.37	72,72,72,72	0
54	MG	2A	3435	1/1	0.92	0.30	50,50,50,50	0
54	MG	2A	3026	1/1	0.92	0.14	40,40,40,40	0
54	MG	1a	1635	1/1	0.92	0.07	57,57,57,57	0
54	MG	2A	3449	1/1	0.92	0.13	41,41,41,41	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3209	1/1	0.92	0.51	54,54,54,54	0
54	MG	1A	3914	1/1	0.92	0.10	54,54,54,54	0
54	MG	1A	3058	1/1	0.92	0.27	54,54,54,54	0
54	MG	1A	3432	1/1	0.92	0.26	32,32,32,32	0
54	MG	2B	210	1/1	0.92	0.47	57,57,57,57	0
54	MG	1a	1780	1/1	0.92	0.15	60,60,60,60	0
54	MG	2A	3215	1/1	0.92	0.25	59,59,59,59	0
54	MG	1A	3666	1/1	0.93	0.15	61,61,61,61	0
54	MG	1A	3773	1/1	0.93	0.25	45,45,45,45	0
54	MG	2O	201	1/1	0.93	0.13	63,63,63,63	0
54	MG	1A	3417	1/1	0.93	0.17	26,26,26,26	0
54	MG	1R	206	1/1	0.93	0.26	34,34,34,34	0
54	MG	2Q	201	1/1	0.93	0.15	60,60,60,60	0
54	MG	2A	3286	1/1	0.93	0.31	66,66,66,66	0
54	MG	1A	3039	1/1	0.93	0.16	54,54,54,54	0
54	MG	1A	3777	1/1	0.93	0.12	40,40,40,40	0
54	MG	1A	3475	1/1	0.93	0.22	29,29,29,29	0
54	MG	1V	204	1/1	0.93	0.31	57,57,57,57	0
54	MG	2V	202	1/1	0.93	0.46	54,54,54,54	0
54	MG	1A	3420	1/1	0.93	0.19	32,32,32,32	0
54	MG	1W	201	1/1	0.93	0.41	50,50,50,50	0
54	MG	1A	3101	1/1	0.93	0.34	42,42,42,42	0
54	MG	2A	3535	1/1	0.93	0.10	63,63,63,63	0
54	MG	2A	3128	1/1	0.93	0.20	76,76,76,76	0
54	MG	1a	1859	1/1	0.93	0.16	67,67,67,67	0
54	MG	23	101	1/1	0.93	0.43	61,61,61,61	0
54	MG	10	103	1/1	0.93	0.13	62,62,62,62	0
54	MG	25	102	1/1	0.93	0.10	61,61,61,61	0
54	MG	27	101	1/1	0.93	0.35	49,49,49,49	0
54	MG	10	105	1/1	0.93	0.08	55,55,55,55	0
54	MG	2A	3545	1/1	0.93	0.13	65,65,65,65	0
54	MG	2A	3138	1/1	0.93	0.21	44,44,44,44	0
54	MG	1A	3332	1/1	0.93	0.14	37,37,37,37	0
54	MG	2a	3001	1/1	0.93	0.20	47,47,47,47	0
54	MG	1A	3202	1/1	0.93	0.12	50,50,50,50	0
54	MG	2A	3552	1/1	0.93	0.15	65,65,65,65	0
54	MG	2A	3310	1/1	0.93	0.30	65,65,65,65	0
54	MG	2A	3142	1/1	0.93	0.18	43,43,43,43	0
54	MG	1A	3053	1/1	0.93	0.19	38,38,38,38	0
54	MG	2A	3561	1/1	0.93	0.09	58,58,58,58	0
54	MG	11	102	1/1	0.93	0.55	59,59,59,59	0
54	MG	1A	3997	1/1	0.93	0.17	76,76,76,76	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3534	1/1	0.93	0.15	24,24,24,24	0
54	MG	1a	1713	1/1	0.93	0.21	52,52,52,52	0
54	MG	2A	3321	1/1	0.93	0.07	63,63,63,63	0
54	MG	2a	3014	1/1	0.93	0.29	71,71,71,71	0
54	MG	1A	3535	1/1	0.93	0.26	53,53,53,53	0
54	MG	1A	4001	1/1	0.93	0.67	60,60,60,60	0
54	MG	2A	3577	1/1	0.93	0.13	59,59,59,59	0
54	MG	1A	3894	1/1	0.93	0.22	59,59,59,59	0
54	MG	2A	3160	1/1	0.93	0.30	50,50,50,50	0
54	MG	1A	3788	1/1	0.93	0.15	48,48,48,48	0
54	MG	15	107	1/1	0.93	0.12	57,57,57,57	0
54	MG	1A	3539	1/1	0.93	0.10	45,45,45,45	0
54	MG	1A	3040	1/1	0.93	0.15	42,42,42,42	0
54	MG	1A	3901	1/1	0.93	0.21	46,46,46,46	0
54	MG	1A	3544	1/1	0.93	0.13	34,34,34,34	0
54	MG	1A	4010	1/1	0.93	0.17	63,63,63,63	0
54	MG	2A	3591	1/1	0.93	0.19	60,60,60,60	0
54	MG	1A	3904	1/1	0.93	0.13	35,35,35,35	0
54	MG	1A	3905	1/1	0.93	0.10	45,45,45,45	0
54	MG	1a	1729	1/1	0.93	0.17	70,70,70,70	0
54	MG	2A	3349	1/1	0.93	0.12	54,54,54,54	0
54	MG	1A	3307	1/1	0.93	0.39	45,45,45,45	0
54	MG	1h	201	1/1	0.93	0.22	62,62,62,62	0
54	MG	2A	3604	1/1	0.93	0.10	56,56,56,56	0
54	MG	1A	3547	1/1	0.93	0.23	40,40,40,40	0
54	MG	1A	3267	1/1	0.93	0.24	58,58,58,58	0
54	MG	2A	3612	1/1	0.93	0.10	69,69,69,69	0
54	MG	2A	3613	1/1	0.93	0.15	40,40,40,40	0
54	MG	1a	1740	1/1	0.93	0.09	66,66,66,66	0
54	MG	1l	201	1/1	0.93	0.21	67,67,67,67	0
54	MG	1A	3616	1/1	0.93	0.11	45,45,45,45	0
54	MG	2A	3359	1/1	0.93	0.16	54,54,54,54	0
54	MG	1A	3345	1/1	0.93	0.15	29,29,29,29	0
54	MG	2A	3187	1/1	0.93	0.18	64,64,64,64	0
54	MG	1A	3915	1/1	0.93	0.21	29,29,29,29	0
54	MG	1A	3346	1/1	0.93	0.21	32,32,32,32	0
54	MG	2A	3374	1/1	0.93	0.17	43,43,43,43	0
54	MG	1A	3552	1/1	0.93	0.16	68,68,68,68	0
54	MG	1a	1748	1/1	0.93	0.11	79,79,79,79	0
54	MG	1a	1749	1/1	0.93	0.15	41,41,41,41	0
54	MG	1A	3807	1/1	0.93	0.15	36,36,36,36	0
54	MG	1a	1630	1/1	0.93	0.16	62,62,62,62	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3927	1/1	0.93	0.10	45,45,45,45	0
54	MG	1B	217	1/1	0.93	0.11	47,47,47,47	0
54	MG	2A	3016	1/1	0.93	0.21	52,52,52,52	0
54	MG	2A	3021	1/1	0.93	0.79	56,56,56,56	0
54	MG	2a	3077	1/1	0.93	0.08	72,72,72,72	0
54	MG	1A	3628	1/1	0.93	0.15	39,39,39,39	0
54	MG	1A	3057	1/1	0.93	0.28	49,49,49,49	0
54	MG	1A	3930	1/1	0.93	0.09	64,64,64,64	0
54	MG	1a	1772	1/1	0.93	0.11	59,59,59,59	0
54	MG	1A	3496	1/1	0.93	0.27	39,39,39,39	0
54	MG	1a	1639	1/1	0.93	0.21	71,71,71,71	0
54	MG	2A	3657	1/1	0.93	0.13	61,61,61,61	0
54	MG	1A	3817	1/1	0.93	0.24	33,33,33,33	0
54	MG	2A	3034	1/1	0.93	0.18	66,66,66,66	0
54	MG	2A	3407	1/1	0.93	0.14	60,60,60,60	0
54	MG	2a	3091	1/1	0.93	0.08	69,69,69,69	0
54	MG	1a	1776	1/1	0.93	0.12	65,65,65,65	0
54	MG	1a	1777	1/1	0.93	0.12	64,64,64,64	0
54	MG	2A	3419	1/1	0.93	0.14	44,44,44,44	0
54	MG	1A	3557	1/1	0.93	0.15	37,37,37,37	0
54	MG	2A	3675	1/1	0.93	0.25	71,71,71,71	0
54	MG	1A	3560	1/1	0.93	0.13	52,52,52,52	0
54	MG	2A	3677	1/1	0.93	0.19	41,41,41,41	0
54	MG	1A	3823	1/1	0.93	0.10	42,42,42,42	0
54	MG	1A	3353	1/1	0.93	0.22	38,38,38,38	0
54	MG	1A	3567	1/1	0.93	0.20	61,61,61,61	0
54	MG	2A	3686	1/1	0.93	0.15	69,69,69,69	0
54	MG	2a	3107	1/1	0.93	0.31	53,53,53,53	0
54	MG	1A	3499	1/1	0.93	0.23	29,29,29,29	0
54	MG	1a	1648	1/1	0.93	0.20	46,46,46,46	0
54	MG	1a	1650	1/1	0.93	0.16	59,59,59,59	0
54	MG	1A	3083	1/1	0.93	0.35	41,41,41,41	0
54	MG	2A	3437	1/1	0.93	0.13	60,60,60,60	0
54	MG	2A	3440	1/1	0.93	0.06	88,88,88,88	0
54	MG	1A	3316	1/1	0.93	0.94	53,53,53,53	0
54	MG	1A	3723	1/1	0.93	0.15	42,42,42,42	0
54	MG	1A	3036	1/1	0.93	0.10	39,39,39,39	0
54	MG	2A	3055	1/1	0.93	0.16	65,65,65,65	0
54	MG	2A	3704	1/1	0.93	0.08	79,79,79,79	0
54	MG	2A	3451	1/1	0.93	0.22	65,65,65,65	0
54	MG	1A	3576	1/1	0.93	0.12	56,56,56,56	0
54	MG	2a	3132	1/1	0.93	0.10	60,60,60,60	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2a	3133	1/1	0.93	0.09	62,62,62,62	0
54	MG	1A	3125	1/1	0.93	0.24	46,46,46,46	0
54	MG	1a	1799	1/1	0.93	0.15	81,81,81,81	0
54	MG	2A	3458	1/1	0.93	0.16	51,51,51,51	0
54	MG	2a	3142	1/1	0.93	0.10	67,67,67,67	0
54	MG	1A	3129	1/1	0.93	0.27	63,63,63,63	0
54	MG	2A	3715	1/1	0.93	0.28	66,66,66,66	0
54	MG	2A	3461	1/1	0.93	0.14	74,74,74,74	0
54	MG	2a	3147	1/1	0.93	0.05	68,68,68,68	0
54	MG	2A	3462	1/1	0.93	0.06	77,77,77,77	0
54	MG	1A	3579	1/1	0.93	0.17	62,62,62,62	0
54	MG	1A	3952	1/1	0.93	0.14	41,41,41,41	0
54	MG	1A	3845	1/1	0.93	0.21	50,50,50,50	0
54	MG	1A	3086	1/1	0.93	0.37	46,46,46,46	0
54	MG	1a	1669	1/1	0.93	0.39	62,62,62,62	0
54	MG	1a	1670	1/1	0.93	0.09	81,81,81,81	0
54	MG	1F	308	1/1	0.93	0.32	60,60,60,60	0
54	MG	1a	1672	1/1	0.93	0.14	71,71,71,71	0
54	MG	2a	3165	1/1	0.93	0.15	68,68,68,68	0
54	MG	1A	3956	1/1	0.93	0.12	59,59,59,59	0
54	MG	1A	3581	1/1	0.93	0.11	53,53,53,53	0
54	MG	1a	1675	1/1	0.93	0.12	70,70,70,70	0
54	MG	1A	3850	1/1	0.93	0.15	53,53,53,53	0
54	MG	1A	3225	1/1	0.93	0.20	49,49,49,49	0
54	MG	1A	3165	1/1	0.93	0.26	66,66,66,66	0
54	MG	2A	3255	1/1	0.93	0.12	40,40,40,40	0
54	MG	2A	3480	1/1	0.93	0.10	62,62,62,62	0
54	MG	1A	3752	1/1	0.93	0.19	53,53,53,53	0
54	MG	1A	3756	1/1	0.93	0.23	67,67,67,67	0
54	MG	1a	1822	1/1	0.93	0.13	56,56,56,56	0
54	MG	1A	3964	1/1	0.93	0.07	66,66,66,66	0
54	MG	1a	1826	1/1	0.93	0.10	85,85,85,85	0
54	MG	1a	1683	1/1	0.93	0.11	69,69,69,69	0
54	MG	1A	3412	1/1	0.93	0.12	44,44,44,44	0
54	MG	1A	3587	1/1	0.93	0.06	47,47,47,47	0
54	MG	2D	301	1/1	0.93	0.83	53,53,53,53	0
54	MG	2A	3498	1/1	0.93	0.08	58,58,58,58	0
54	MG	1A	3588	1/1	0.93	0.14	76,76,76,76	0
54	MG	1A	3661	1/1	0.93	0.24	48,48,48,48	0
55	HGR	2A	3730	36/36	0.93	0.25	35,49,57,66	0
54	MG	1A	3467	1/1	0.93	0.16	28,28,28,28	0
57	MPD	1T	204	8/8	0.93	0.23	68,72,74,77	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1a	1835	1/1	0.93	0.21	72,72,72,72	0
54	MG	2A	3505	1/1	0.93	0.09	74,74,74,74	0
57	MPD	2A	3733	8/8	0.93	0.18	54,63,65,65	0
54	MG	2E	307	1/1	0.93	0.16	68,68,68,68	0
54	MG	1a	1836	1/1	0.93	0.12	71,71,71,71	0
54	MG	1A	3372	1/1	0.93	0.18	29,29,29,29	0
54	MG	1a	1839	1/1	0.93	0.06	77,77,77,77	0
59	ZN	24	501	1/1	0.93	0.06	128,128,128,128	0
54	MG	1P	205	1/1	0.93	0.11	38,38,38,38	0
54	MG	2A	3482	1/1	0.94	0.14	63,63,63,63	0
54	MG	2D	304	1/1	0.94	0.42	57,57,57,57	0
54	MG	1A	3732	1/1	0.94	0.13	40,40,40,40	0
54	MG	1A	3240	1/1	0.94	0.29	48,48,48,48	0
54	MG	1A	3203	1/1	0.94	0.24	54,54,54,54	0
54	MG	1F	304	1/1	0.94	0.29	40,40,40,40	0
54	MG	2E	304	1/1	0.94	0.24	51,51,51,51	0
54	MG	2A	3489	1/1	0.94	0.13	77,77,77,77	0
54	MG	1A	3012	1/1	0.94	0.20	43,43,43,43	0
54	MG	1A	3131	1/1	0.94	0.09	40,40,40,40	0
54	MG	2A	3492	1/1	0.94	0.12	49,49,49,49	0
54	MG	2A	3493	1/1	0.94	0.16	56,56,56,56	0
54	MG	1F	309	1/1	0.94	0.17	33,33,33,33	0
54	MG	1A	3338	1/1	0.94	0.19	33,33,33,33	0
54	MG	1A	3186	1/1	0.94	0.10	64,64,64,64	0
54	MG	1A	3747	1/1	0.94	0.12	48,48,48,48	0
54	MG	1A	3342	1/1	0.94	0.19	62,62,62,62	0
54	MG	1F	317	1/1	0.94	0.18	51,51,51,51	0
54	MG	1A	3750	1/1	0.94	0.22	25,25,25,25	0
54	MG	2A	3503	1/1	0.94	0.11	56,56,56,56	0
54	MG	1A	3099	1/1	0.94	0.20	41,41,41,41	0
54	MG	1A	3755	1/1	0.94	0.13	64,64,64,64	0
54	MG	2A	3269	1/1	0.94	0.15	61,61,61,61	0
54	MG	2A	3086	1/1	0.94	0.22	52,52,52,52	0
54	MG	2A	3087	1/1	0.94	0.24	42,42,42,42	0
54	MG	2W	202	1/1	0.94	0.36	57,57,57,57	0
54	MG	1A	3134	1/1	0.94	0.36	44,44,44,44	0
54	MG	1N	202	1/1	0.94	0.31	51,51,51,51	0
54	MG	2A	3090	1/1	0.94	0.20	51,51,51,51	0
54	MG	1A	3757	1/1	0.94	0.13	67,67,67,67	0
54	MG	20	102	1/1	0.94	0.40	61,61,61,61	0
54	MG	1A	3405	1/1	0.94	0.16	41,41,41,41	0
54	MG	1A	3863	1/1	0.94	0.10	37,37,37,37	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3524	1/1	0.94	0.12	58,58,58,58	0
54	MG	1a	1834	1/1	0.94	0.11	74,74,74,74	0
54	MG	2A	3097	1/1	0.94	0.09	56,56,56,56	0
54	MG	2A	3528	1/1	0.94	0.16	68,68,68,68	0
54	MG	1A	3973	1/1	0.94	0.14	43,43,43,43	0
54	MG	2A	3530	1/1	0.94	0.07	66,66,66,66	0
54	MG	1A	3974	1/1	0.94	0.20	65,65,65,65	0
54	MG	1a	1837	1/1	0.94	0.10	68,68,68,68	0
54	MG	1A	3864	1/1	0.94	0.12	53,53,53,53	0
54	MG	1A	3113	1/1	0.94	0.16	44,44,44,44	0
54	MG	2A	3536	1/1	0.94	0.08	65,65,65,65	0
54	MG	1A	3979	1/1	0.94	0.13	59,59,59,59	0
54	MG	1A	3347	1/1	0.94	0.33	55,55,55,55	0
54	MG	1A	3194	1/1	0.94	0.30	52,52,52,52	0
54	MG	2A	3292	1/1	0.94	0.21	64,64,64,64	0
54	MG	1A	3983	1/1	0.94	0.14	71,71,71,71	0
54	MG	2A	3113	1/1	0.94	0.10	59,59,59,59	0
54	MG	2A	3547	1/1	0.94	0.17	57,57,57,57	0
54	MG	1A	3305	1/1	0.94	0.27	43,43,43,43	0
54	MG	2A	3115	1/1	0.94	0.14	72,72,72,72	0
54	MG	2A	3550	1/1	0.94	0.15	75,75,75,75	0
54	MG	2A	3551	1/1	0.94	0.15	60,60,60,60	0
54	MG	1A	3871	1/1	0.94	0.20	35,35,35,35	0
54	MG	1a	1848	1/1	0.94	0.13	74,74,74,74	0
54	MG	2A	3302	1/1	0.94	0.34	59,59,59,59	0
54	MG	2A	3555	1/1	0.94	0.08	63,63,63,63	0
54	MG	2A	3303	1/1	0.94	0.27	58,58,58,58	0
54	MG	1A	3162	1/1	0.94	0.46	41,41,41,41	0
54	MG	1A	3771	1/1	0.94	0.13	57,57,57,57	0
54	MG	2A	3122	1/1	0.94	0.21	54,54,54,54	0
54	MG	1V	205	1/1	0.94	0.10	67,67,67,67	0
54	MG	1A	3877	1/1	0.94	0.16	60,60,60,60	0
54	MG	2a	3031	1/1	0.94	0.08	65,65,65,65	0
54	MG	2a	3033	1/1	0.94	0.16	71,71,71,71	0
54	MG	1A	3224	1/1	0.94	0.48	41,41,41,41	0
54	MG	2A	3570	1/1	0.94	0.19	53,53,53,53	0
54	MG	1W	203	1/1	0.94	0.15	40,40,40,40	0
54	MG	1A	3678	1/1	0.94	0.16	45,45,45,45	0
54	MG	2A	3317	1/1	0.94	0.35	77,77,77,77	0
54	MG	2a	3041	1/1	0.94	0.17	78,78,78,78	0
54	MG	2A	3318	1/1	0.94	0.11	63,63,63,63	0
54	MG	2A	3129	1/1	0.94	0.17	61,61,61,61	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2a	3044	1/1	0.94	0.14	74,74,74,74	0
54	MG	1A	3484	1/1	0.94	0.11	54,54,54,54	0
54	MG	1a	1861	1/1	0.94	0.15	58,58,58,58	0
54	MG	1A	3416	1/1	0.94	0.18	22,22,22,22	0
54	MG	2a	3049	1/1	0.94	0.21	59,59,59,59	0
54	MG	1a	1709	1/1	0.94	0.13	73,73,73,73	0
54	MG	2A	3586	1/1	0.94	0.11	46,46,46,46	0
54	MG	1a	1869	1/1	0.94	0.05	82,82,82,82	0
54	MG	1A	3995	1/1	0.94	0.12	61,61,61,61	0
54	MG	2a	3056	1/1	0.94	0.09	71,71,71,71	0
54	MG	1A	3358	1/1	0.94	0.18	31,31,31,31	0
54	MG	2A	3143	1/1	0.94	0.32	49,49,49,49	0
54	MG	1A	3683	1/1	0.94	0.07	55,55,55,55	0
54	MG	1A	3998	1/1	0.94	0.10	57,57,57,57	0
54	MG	1A	3359	1/1	0.94	0.17	51,51,51,51	0
54	MG	2A	3334	1/1	0.94	0.10	49,49,49,49	0
54	MG	1A	3196	1/1	0.94	0.17	57,57,57,57	0
54	MG	1A	3422	1/1	0.94	0.14	50,50,50,50	0
54	MG	2A	3153	1/1	0.94	0.08	46,46,46,46	0
54	MG	1A	3362	1/1	0.94	0.18	54,54,54,54	0
54	MG	2A	3155	1/1	0.94	0.14	60,60,60,60	0
54	MG	2A	3608	1/1	0.94	0.08	68,68,68,68	0
54	MG	2A	3609	1/1	0.94	0.21	62,62,62,62	0
54	MG	2A	3347	1/1	0.94	0.15	59,59,59,59	0
54	MG	14	101	1/1	0.94	0.22	65,65,65,65	0
54	MG	1A	3226	1/1	0.94	0.36	43,43,43,43	0
54	MG	1a	1720	1/1	0.94	0.15	68,68,68,68	0
54	MG	2A	3161	1/1	0.94	0.55	66,66,66,66	0
54	MG	2A	3353	1/1	0.94	0.09	49,49,49,49	0
54	MG	1a	1881	1/1	0.94	0.10	66,66,66,66	0
54	MG	2A	3621	1/1	0.94	0.27	54,54,54,54	0
54	MG	1A	4005	1/1	0.94	0.19	69,69,69,69	0
54	MG	1A	3497	1/1	0.94	0.24	42,42,42,42	0
54	MG	15	108	1/1	0.94	0.24	66,66,66,66	0
54	MG	1A	3163	1/1	0.94	0.16	46,46,46,46	0
54	MG	2A	3362	1/1	0.94	0.21	77,77,77,77	0
54	MG	2A	3167	1/1	0.94	0.18	46,46,46,46	0
54	MG	2A	3365	1/1	0.94	0.49	63,63,63,63	0
54	MG	2A	3366	1/1	0.94	0.11	56,56,56,56	0
54	MG	2A	3168	1/1	0.94	0.09	54,54,54,54	0
54	MG	2A	3369	1/1	0.94	0.14	56,56,56,56	0
54	MG	1A	3569	1/1	0.94	0.22	54,54,54,54	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1a	1727	1/1	0.94	0.12	72,72,72,72	0
54	MG	2A	3644	1/1	0.94	0.16	71,71,71,71	0
54	MG	1e	204	1/1	0.94	0.17	77,77,77,77	0
54	MG	1A	3570	1/1	0.94	0.20	58,58,58,58	0
54	MG	1A	3429	1/1	0.94	0.24	35,35,35,35	0
54	MG	2a	3103	1/1	0.94	0.21	53,53,53,53	0
54	MG	1A	3795	1/1	0.94	0.12	54,54,54,54	0
54	MG	1a	1731	1/1	0.94	0.11	57,57,57,57	0
54	MG	1a	1732	1/1	0.94	0.15	75,75,75,75	0
54	MG	1A	3572	1/1	0.94	0.11	54,54,54,54	0
54	MG	1a	1606	1/1	0.94	0.27	62,62,62,62	0
54	MG	1A	3114	1/1	0.94	0.36	47,47,47,47	0
54	MG	2A	3392	1/1	0.94	0.10	65,65,65,65	0
54	MG	2A	3663	1/1	0.94	0.09	47,47,47,47	0
54	MG	2A	3664	1/1	0.94	0.11	46,46,46,46	0
54	MG	2A	3394	1/1	0.94	0.16	48,48,48,48	0
54	MG	1a	1610	1/1	0.94	0.22	62,62,62,62	0
54	MG	2a	3121	1/1	0.94	0.14	62,62,62,62	0
54	MG	2A	3185	1/1	0.94	0.16	63,63,63,63	0
54	MG	2a	3123	1/1	0.94	0.14	70,70,70,70	0
54	MG	2a	3124	1/1	0.94	0.06	76,76,76,76	0
54	MG	1m	201	1/1	0.94	0.08	74,74,74,74	0
54	MG	1A	4021	1/1	0.94	0.13	58,58,58,58	0
54	MG	1A	3701	1/1	0.94	0.12	66,66,66,66	0
54	MG	1A	3319	1/1	0.94	0.21	44,44,44,44	0
54	MG	2a	3130	1/1	0.94	0.11	79,79,79,79	0
54	MG	1y	201	1/1	0.94	0.25	70,70,70,70	0
54	MG	1A	3800	1/1	0.94	0.22	59,59,59,59	0
54	MG	1A	3706	1/1	0.94	0.31	49,49,49,49	0
54	MG	2A	3406	1/1	0.94	0.22	66,66,66,66	0
54	MG	2A	3682	1/1	0.94	0.15	65,65,65,65	0
54	MG	1a	1619	1/1	0.94	0.16	60,60,60,60	0
54	MG	1A	3321	1/1	0.94	0.16	54,54,54,54	0
54	MG	1a	1621	1/1	0.94	0.17	59,59,59,59	0
54	MG	1a	1622	1/1	0.94	0.16	56,56,56,56	0
54	MG	1A	3269	1/1	0.94	0.19	42,42,42,42	0
54	MG	2A	3198	1/1	0.94	0.09	65,65,65,65	0
54	MG	2A	3008	1/1	0.94	0.28	46,46,46,46	0
54	MG	2A	3425	1/1	0.94	0.18	64,64,64,64	0
54	MG	2A	3696	1/1	0.94	0.10	57,57,57,57	0
54	MG	2A	3011	1/1	0.94	0.29	69,69,69,69	0
54	MG	2a	3156	1/1	0.94	0.09	80,80,80,80	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3015	1/1	0.94	0.13	76,76,76,76	0
54	MG	1A	3271	1/1	0.94	0.10	50,50,50,50	0
54	MG	1A	3924	1/1	0.94	0.09	48,48,48,48	0
54	MG	2A	3705	1/1	0.94	0.11	79,79,79,79	0
54	MG	2a	3162	1/1	0.94	0.12	62,62,62,62	0
54	MG	1B	212	1/1	0.94	0.20	48,48,48,48	0
54	MG	1B	215	1/1	0.94	0.29	51,51,51,51	0
54	MG	2a	3166	1/1	0.94	0.19	72,72,72,72	0
54	MG	1a	1632	1/1	0.94	0.23	59,59,59,59	0
54	MG	1A	3806	1/1	0.94	0.08	55,55,55,55	0
54	MG	1A	3713	1/1	0.94	0.18	58,58,58,58	0
54	MG	2A	3444	1/1	0.94	0.14	73,73,73,73	0
54	MG	1A	3715	1/1	0.94	0.09	38,38,38,38	0
54	MG	2A	3448	1/1	0.94	0.07	57,57,57,57	0
54	MG	2A	3032	1/1	0.94	0.19	60,60,60,60	0
54	MG	1A	3272	1/1	0.94	0.26	79,79,79,79	0
54	MG	1A	3813	1/1	0.94	0.14	46,46,46,46	0
54	MG	1A	3815	1/1	0.94	0.35	52,52,52,52	0
54	MG	2a	3181	1/1	0.94	0.14	77,77,77,77	0
54	MG	1B	222	1/1	0.94	0.07	59,59,59,59	0
54	MG	2a	3183	1/1	0.94	0.08	69,69,69,69	0
54	MG	1A	3717	1/1	0.94	0.08	64,64,64,64	0
54	MG	1A	3649	1/1	0.94	0.09	62,62,62,62	0
54	MG	1A	3026	1/1	0.94	0.39	40,40,40,40	0
54	MG	1A	3721	1/1	0.94	0.11	47,47,47,47	0
54	MG	1A	3822	1/1	0.94	0.12	40,40,40,40	0
54	MG	1A	3004	1/1	0.94	0.13	53,53,53,53	0
54	MG	2f	201	1/1	0.94	0.10	54,54,54,54	0
54	MG	1A	3201	1/1	0.94	0.53	48,48,48,48	0
54	MG	1A	3827	1/1	0.94	0.21	42,42,42,42	0
54	MG	1A	3724	1/1	0.94	0.28	34,34,34,34	0
54	MG	2A	3051	1/1	0.94	0.09	42,42,42,42	0
54	MG	1D	314	1/1	0.94	0.10	49,49,49,49	0
54	MG	1D	315	1/1	0.94	0.59	51,51,51,51	0
57	MPD	18	103	8/8	0.94	0.25	31,44,47,48	0
54	MG	1A	3330	1/1	0.94	0.14	52,52,52,52	0
54	MG	1A	3097	1/1	0.94	0.13	57,57,57,57	0
54	MG	1a	1802	1/1	0.94	0.04	79,79,79,79	0
54	MG	1a	1660	1/1	0.94	0.31	68,68,68,68	0
58	ARG	1B	230	12/12	0.94	0.19	34,54,66,69	0
54	MG	2A	3241	1/1	0.94	0.08	60,60,60,60	0
54	MG	1D	318	1/1	0.94	0.12	66,66,66,66	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3730	1/1	0.94	0.17	32,32,32,32	0
54	MG	1A	3731	1/1	0.94	0.15	52,52,52,52	0
54	MG	1A	3838	1/1	0.94	0.20	69,69,69,69	0
54	MG	1A	3187	1/1	0.95	0.34	43,43,43,43	0
54	MG	1a	1734	1/1	0.95	0.14	41,41,41,41	0
54	MG	2A	3214	1/1	0.95	0.25	74,74,74,74	0
54	MG	1a	1736	1/1	0.95	0.08	79,79,79,79	0
54	MG	2A	3013	1/1	0.95	0.14	57,57,57,57	0
54	MG	1A	3529	1/1	0.95	0.15	62,62,62,62	0
54	MG	2A	3218	1/1	0.95	0.14	71,71,71,71	0
54	MG	11	101	1/1	0.95	0.39	51,51,51,51	0
54	MG	1A	3617	1/1	0.95	0.09	51,51,51,51	0
54	MG	1A	3725	1/1	0.95	0.34	51,51,51,51	0
54	MG	1A	3619	1/1	0.95	0.16	39,39,39,39	0
54	MG	1A	3988	1/1	0.95	0.13	49,49,49,49	0
54	MG	1A	3854	1/1	0.95	0.14	38,38,38,38	0
54	MG	1A	3855	1/1	0.95	0.14	43,43,43,43	0
54	MG	2A	3028	1/1	0.95	0.32	52,52,52,52	0
54	MG	15	102	1/1	0.95	0.26	47,47,47,47	0
54	MG	2A	3031	1/1	0.95	0.28	52,52,52,52	0
54	MG	2D	307	1/1	0.95	0.66	44,44,44,44	0
54	MG	1A	3448	1/1	0.95	0.14	47,47,47,47	0
54	MG	1A	3121	1/1	0.95	0.27	25,25,25,25	0
54	MG	2D	311	1/1	0.95	0.14	36,36,36,36	0
54	MG	2D	312	1/1	0.95	0.24	63,63,63,63	0
54	MG	1A	3106	1/1	0.95	0.22	42,42,42,42	0
54	MG	2A	3035	1/1	0.95	0.50	64,64,64,64	0
54	MG	2A	3234	1/1	0.95	0.14	58,58,58,58	0
54	MG	1A	3063	1/1	0.95	0.13	41,41,41,41	0
54	MG	2A	3486	1/1	0.95	0.14	56,56,56,56	0
54	MG	1A	3538	1/1	0.95	0.30	65,65,65,65	0
54	MG	1A	3452	1/1	0.95	0.15	59,59,59,59	0
54	MG	1A	3264	1/1	0.95	0.11	47,47,47,47	0
54	MG	19	102	1/1	0.95	0.20	64,64,64,64	0
54	MG	1a	1601	1/1	0.95	0.13	46,46,46,46	0
54	MG	2A	3244	1/1	0.95	0.14	62,62,62,62	0
54	MG	1A	3542	1/1	0.95	0.17	60,60,60,60	0
54	MG	1A	3543	1/1	0.95	0.19	48,48,48,48	0
54	MG	2A	3495	1/1	0.95	0.18	64,64,64,64	0
54	MG	1A	3867	1/1	0.95	0.07	57,57,57,57	0
54	MG	2A	3497	1/1	0.95	0.20	56,56,56,56	0
54	MG	1A	3745	1/1	0.95	0.16	38,38,38,38	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1a	1608	1/1	0.95	0.08	66,66,66,66	0
54	MG	2A	3250	1/1	0.95	0.15	70,70,70,70	0
54	MG	2T	204	1/1	0.95	0.07	48,48,48,48	0
54	MG	1A	3323	1/1	0.95	0.18	26,26,26,26	0
54	MG	2W	201	1/1	0.95	0.43	49,49,49,49	0
54	MG	1A	3545	1/1	0.95	0.17	50,50,50,50	0
54	MG	1A	3457	1/1	0.95	0.12	47,47,47,47	0
54	MG	1a	1782	1/1	0.95	0.14	68,68,68,68	0
54	MG	2A	3506	1/1	0.95	0.10	61,61,61,61	0
54	MG	1A	3875	1/1	0.95	0.10	47,47,47,47	0
54	MG	2A	3511	1/1	0.95	0.17	68,68,68,68	0
54	MG	2A	3257	1/1	0.95	0.19	28,28,28,28	0
54	MG	1a	1784	1/1	0.95	0.12	64,64,64,64	0
54	MG	1A	3265	1/1	0.95	0.08	76,76,76,76	0
54	MG	1A	3751	1/1	0.95	0.15	47,47,47,47	0
54	MG	2A	3059	1/1	0.95	0.10	46,46,46,46	0
54	MG	1A	3193	1/1	0.95	0.44	45,45,45,45	0
54	MG	1A	4012	1/1	0.95	0.23	37,37,37,37	0
54	MG	1A	3384	1/1	0.95	0.20	30,30,30,30	0
54	MG	2A	3268	1/1	0.95	0.16	55,55,55,55	0
54	MG	1A	4016	1/1	0.95	0.16	61,61,61,61	0
54	MG	1A	4017	1/1	0.95	0.20	53,53,53,53	0
54	MG	1a	1794	1/1	0.95	0.13	62,62,62,62	0
54	MG	1A	3268	1/1	0.95	0.44	40,40,40,40	0
54	MG	1a	1796	1/1	0.95	0.05	80,80,80,80	0
54	MG	2A	3274	1/1	0.95	0.12	45,45,45,45	0
54	MG	1A	3551	1/1	0.95	0.08	61,61,61,61	0
54	MG	1A	3885	1/1	0.95	0.18	33,33,33,33	0
54	MG	2A	3073	1/1	0.95	0.19	67,67,67,67	0
54	MG	1A	3127	1/1	0.95	0.12	48,48,48,48	0
54	MG	2A	3279	1/1	0.95	0.17	33,33,33,33	0
54	MG	1B	202	1/1	0.95	0.22	63,63,63,63	0
54	MG	1A	3761	1/1	0.95	0.22	29,29,29,29	0
54	MG	1A	3553	1/1	0.95	0.34	38,38,38,38	0
54	MG	2a	3015	1/1	0.95	0.11	62,62,62,62	0
54	MG	2a	3016	1/1	0.95	0.11	60,60,60,60	0
54	MG	2A	3283	1/1	0.95	0.20	37,37,37,37	0
54	MG	2A	3544	1/1	0.95	0.20	62,62,62,62	0
54	MG	1A	3009	1/1	0.95	0.16	37,37,37,37	0
54	MG	1A	3130	1/1	0.95	0.12	35,35,35,35	0
54	MG	2a	3021	1/1	0.95	0.22	63,63,63,63	0
54	MG	1A	3273	1/1	0.95	0.28	41,41,41,41	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1B	209	1/1	0.95	0.19	56,56,56,56	0
54	MG	2A	3085	1/1	0.95	0.52	53,53,53,53	0
54	MG	1A	3558	1/1	0.95	0.15	39,39,39,39	0
54	MG	1A	3473	1/1	0.95	0.11	55,55,55,55	0
54	MG	1A	3474	1/1	0.95	0.09	51,51,51,51	0
54	MG	2a	3029	1/1	0.95	0.10	66,66,66,66	0
54	MG	1B	213	1/1	0.95	0.18	48,48,48,48	0
54	MG	2A	3294	1/1	0.95	0.10	65,65,65,65	0
54	MG	1A	3566	1/1	0.95	0.17	39,39,39,39	0
54	MG	2A	3557	1/1	0.95	0.11	40,40,40,40	0
54	MG	1A	3229	1/1	0.95	0.14	41,41,41,41	0
54	MG	1a	1815	1/1	0.95	0.12	69,69,69,69	0
54	MG	1A	3333	1/1	0.95	0.21	24,24,24,24	0
54	MG	2A	3300	1/1	0.95	0.37	69,69,69,69	0
54	MG	1a	1817	1/1	0.95	0.26	61,61,61,61	0
54	MG	1A	3397	1/1	0.95	0.18	50,50,50,50	0
54	MG	1A	3277	1/1	0.95	0.26	59,59,59,59	0
54	MG	2A	3099	1/1	0.95	0.15	51,51,51,51	0
54	MG	2A	3571	1/1	0.95	0.21	64,64,64,64	0
54	MG	2A	3100	1/1	0.95	0.22	50,50,50,50	0
54	MG	1A	3279	1/1	0.95	0.18	33,33,33,33	0
54	MG	2A	3574	1/1	0.95	0.09	43,43,43,43	0
54	MG	2A	3102	1/1	0.95	0.23	67,67,67,67	0
54	MG	2A	3578	1/1	0.95	0.09	63,63,63,63	0
54	MG	1A	3906	1/1	0.95	0.05	62,62,62,62	0
54	MG	2a	3054	1/1	0.95	0.10	72,72,72,72	0
54	MG	2A	3104	1/1	0.95	0.19	66,66,66,66	0
54	MG	1A	3480	1/1	0.95	0.11	60,60,60,60	0
54	MG	1a	1823	1/1	0.95	0.14	78,78,78,78	0
54	MG	1a	1824	1/1	0.95	0.19	69,69,69,69	0
54	MG	1a	1655	1/1	0.95	0.17	63,63,63,63	0
54	MG	1A	3669	1/1	0.95	0.09	60,60,60,60	0
54	MG	1A	3910	1/1	0.95	0.17	38,38,38,38	0
54	MG	1A	3336	1/1	0.95	0.53	47,47,47,47	0
54	MG	1A	3230	1/1	0.95	0.33	50,50,50,50	0
54	MG	1B	227	1/1	0.95	0.10	57,57,57,57	0
54	MG	2A	3592	1/1	0.95	0.09	59,59,59,59	0
54	MG	2A	3593	1/1	0.95	0.33	56,56,56,56	0
54	MG	2A	3594	1/1	0.95	0.17	56,56,56,56	0
54	MG	1A	3784	1/1	0.95	0.15	48,48,48,48	0
54	MG	2a	3070	1/1	0.95	0.14	72,72,72,72	0
54	MG	1A	3065	1/1	0.95	0.22	37,37,37,37	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1a	1833	1/1	0.95	0.08	73,73,73,73	0
54	MG	1A	3675	1/1	0.95	0.16	19,19,19,19	0
54	MG	1D	307	1/1	0.95	0.34	48,48,48,48	0
54	MG	1D	308	1/1	0.95	0.10	23,23,23,23	0
54	MG	1A	3919	1/1	0.95	0.23	35,35,35,35	0
54	MG	1A	3045	1/1	0.95	0.21	35,35,35,35	0
54	MG	1A	3133	1/1	0.95	0.71	51,51,51,51	0
54	MG	1A	3791	1/1	0.95	0.13	50,50,50,50	0
54	MG	1A	3287	1/1	0.95	0.42	40,40,40,40	0
54	MG	2A	3611	1/1	0.95	0.11	40,40,40,40	0
54	MG	2a	3085	1/1	0.95	0.17	60,60,60,60	0
54	MG	1A	3793	1/1	0.95	0.11	42,42,42,42	0
54	MG	1A	3069	1/1	0.95	0.20	40,40,40,40	0
54	MG	1A	3015	1/1	0.95	0.28	37,37,37,37	0
54	MG	2A	3615	1/1	0.95	0.10	45,45,45,45	0
54	MG	2A	3348	1/1	0.95	0.08	63,63,63,63	0
54	MG	2A	3136	1/1	0.95	0.11	47,47,47,47	0
54	MG	1A	3681	1/1	0.95	0.07	64,64,64,64	0
54	MG	1A	3415	1/1	0.95	0.23	31,31,31,31	0
54	MG	2A	3620	1/1	0.95	0.14	44,44,44,44	0
54	MG	1A	3933	1/1	0.95	0.09	53,53,53,53	0
54	MG	1E	307	1/1	0.95	0.20	26,26,26,26	0
54	MG	1A	3935	1/1	0.95	0.12	37,37,37,37	0
54	MG	1A	3140	1/1	0.95	0.19	54,54,54,54	0
54	MG	2a	3100	1/1	0.95	0.12	78,78,78,78	0
54	MG	2A	3627	1/1	0.95	0.30	61,61,61,61	0
54	MG	2a	3102	1/1	0.95	0.26	73,73,73,73	0
54	MG	1A	3117	1/1	0.95	0.37	40,40,40,40	0
54	MG	2A	3630	1/1	0.95	0.13	63,63,63,63	0
54	MG	2A	3631	1/1	0.95	0.07	82,82,82,82	0
54	MG	2A	3632	1/1	0.95	0.15	58,58,58,58	0
54	MG	1a	1854	1/1	0.95	0.21	76,76,76,76	0
54	MG	1a	1855	1/1	0.95	0.08	52,52,52,52	0
54	MG	2a	3109	1/1	0.95	0.20	70,70,70,70	0
54	MG	1a	1857	1/1	0.95	0.07	60,60,60,60	0
54	MG	1A	3350	1/1	0.95	0.18	32,32,32,32	0
54	MG	1F	306	1/1	0.95	0.15	31,31,31,31	0
54	MG	1F	307	1/1	0.95	0.24	39,39,39,39	0
54	MG	1A	3146	1/1	0.95	0.16	36,36,36,36	0
54	MG	2a	3119	1/1	0.95	0.23	67,67,67,67	0
54	MG	1a	1863	1/1	0.95	0.18	72,72,72,72	0
54	MG	1A	3689	1/1	0.95	0.08	69,69,69,69	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1a	1866	1/1	0.95	0.10	44,44,44,44	0
54	MG	2A	3372	1/1	0.95	0.12	51,51,51,51	0
54	MG	1A	3205	1/1	0.95	0.18	56,56,56,56	0
54	MG	1A	3590	1/1	0.95	0.15	26,26,26,26	0
54	MG	2a	3126	1/1	0.95	0.09	74,74,74,74	0
54	MG	2A	3376	1/1	0.95	0.13	64,64,64,64	0
54	MG	1A	3298	1/1	0.95	0.32	56,56,56,56	0
54	MG	1A	3808	1/1	0.95	0.16	51,51,51,51	0
54	MG	1A	3593	1/1	0.95	0.19	37,37,37,37	0
54	MG	2A	3659	1/1	0.95	0.15	55,55,55,55	0
54	MG	1G	201	1/1	0.95	0.06	69,69,69,69	0
54	MG	1A	3120	1/1	0.95	0.31	38,38,38,38	0
54	MG	2a	3135	1/1	0.95	0.10	73,73,73,73	0
54	MG	2a	3136	1/1	0.95	0.15	72,72,72,72	0
54	MG	2A	3387	1/1	0.95	0.24	66,66,66,66	0
54	MG	2A	3388	1/1	0.95	0.15	63,63,63,63	0
54	MG	2a	3140	1/1	0.95	0.21	71,71,71,71	0
54	MG	1A	3812	1/1	0.95	0.16	67,67,67,67	0
54	MG	1G	204	1/1	0.95	0.07	56,56,56,56	0
54	MG	1A	3595	1/1	0.95	0.64	47,47,47,47	0
54	MG	1A	3176	1/1	0.95	0.14	49,49,49,49	0
54	MG	2A	3670	1/1	0.95	0.23	70,70,70,70	0
54	MG	2A	3672	1/1	0.95	0.15	57,57,57,57	0
54	MG	2A	3395	1/1	0.95	0.21	78,78,78,78	0
54	MG	2a	3149	1/1	0.95	0.08	61,61,61,61	0
54	MG	2A	3674	1/1	0.95	0.25	52,52,52,52	0
54	MG	1A	3304	1/1	0.95	0.57	52,52,52,52	0
54	MG	2a	3153	1/1	0.95	0.13	82,82,82,82	0
54	MG	1a	1703	1/1	0.95	0.10	58,58,58,58	0
54	MG	2A	3177	1/1	0.95	0.15	65,65,65,65	0
54	MG	2A	3678	1/1	0.95	0.14	43,43,43,43	0
54	MG	1A	3361	1/1	0.95	0.15	58,58,58,58	0
54	MG	2a	3159	1/1	0.95	0.07	76,76,76,76	0
54	MG	2A	3179	1/1	0.95	0.24	70,70,70,70	0
54	MG	1A	3211	1/1	0.95	0.10	61,61,61,61	0
54	MG	1A	3433	1/1	0.95	0.23	27,27,27,27	0
54	MG	1A	3705	1/1	0.95	0.13	53,53,53,53	0
54	MG	2a	3164	1/1	0.95	0.11	71,71,71,71	0
54	MG	1A	3254	1/1	0.95	0.76	48,48,48,48	0
54	MG	1A	3604	1/1	0.95	0.09	58,58,58,58	0
54	MG	1e	202	1/1	0.95	0.34	59,59,59,59	0
54	MG	2A	3691	1/1	0.95	0.24	45,45,45,45	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3409	1/1	0.95	0.12	69,69,69,69	0
54	MG	2A	3411	1/1	0.95	0.17	70,70,70,70	0
54	MG	1A	3825	1/1	0.95	0.10	69,69,69,69	0
54	MG	2A	3415	1/1	0.95	0.14	55,55,55,55	0
54	MG	1A	3180	1/1	0.95	0.23	36,36,36,36	0
54	MG	1A	3709	1/1	0.95	0.56	42,42,42,42	0
54	MG	1A	3366	1/1	0.95	0.16	37,37,37,37	0
54	MG	2A	3700	1/1	0.95	0.09	64,64,64,64	0
54	MG	1A	3711	1/1	0.95	0.34	54,54,54,54	0
54	MG	1R	207	1/1	0.95	0.20	57,57,57,57	0
54	MG	1A	3834	1/1	0.95	0.15	27,27,27,27	0
54	MG	1A	3257	1/1	0.95	0.34	44,44,44,44	0
54	MG	1A	3972	1/1	0.95	0.15	31,31,31,31	0
54	MG	1U	202	1/1	0.95	0.48	45,45,45,45	0
54	MG	2A	3709	1/1	0.95	0.14	46,46,46,46	0
54	MG	2A	3710	1/1	0.95	0.16	46,46,46,46	0
54	MG	2A	3431	1/1	0.95	0.15	61,61,61,61	0
54	MG	1A	3714	1/1	0.95	0.36	56,56,56,56	0
54	MG	1A	3609	1/1	0.95	0.13	51,51,51,51	0
54	MG	2A	3434	1/1	0.95	0.16	44,44,44,44	0
54	MG	1A	3148	1/1	0.95	0.17	36,36,36,36	0
54	MG	2A	3200	1/1	0.95	0.15	50,50,50,50	0
54	MG	1A	3976	1/1	0.95	0.12	27,27,27,27	0
54	MG	2A	3202	1/1	0.95	0.22	48,48,48,48	0
54	MG	2A	3721	1/1	0.95	0.12	55,55,55,55	0
54	MG	1o	102	1/1	0.95	0.22	60,60,60,60	0
54	MG	1A	3977	1/1	0.95	0.14	36,36,36,36	0
54	MG	1a	1725	1/1	0.95	0.19	70,70,70,70	0
54	MG	1A	3443	1/1	0.95	0.17	30,30,30,30	0
54	MG	1Z	301	1/1	0.95	0.21	71,71,71,71	0
54	MG	1O	102	1/1	0.95	0.46	49,49,49,49	0
54	MG	1A	3522	1/1	0.95	0.12	61,61,61,61	0
54	MG	1A	3446	1/1	0.95	0.31	52,52,52,52	0
54	MG	2B	202	1/1	0.95	0.23	78,78,78,78	0
54	MG	1A	3527	1/1	0.95	0.26	27,27,27,27	0
54	MG	1A	3266	1/1	0.96	0.22	51,51,51,51	0
54	MG	1A	3472	1/1	0.96	0.10	54,54,54,54	0
54	MG	2V	201	1/1	0.96	0.17	65,65,65,65	0
54	MG	1A	3536	1/1	0.96	0.06	61,61,61,61	0
54	MG	1D	301	1/1	0.96	0.46	39,39,39,39	0
54	MG	1a	1752	1/1	0.96	0.10	65,65,65,65	0
54	MG	2A	3332	1/1	0.96	0.06	65,65,65,65	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1D	304	1/1	0.96	0.30	43,43,43,43	0
54	MG	1A	3237	1/1	0.96	0.59	41,41,41,41	0
54	MG	2A	3556	1/1	0.96	0.25	66,66,66,66	0
54	MG	1A	3599	1/1	0.96	0.22	66,66,66,66	0
54	MG	1a	1759	1/1	0.96	0.12	60,60,60,60	0
54	MG	2A	3559	1/1	0.96	0.17	38,38,38,38	0
54	MG	1n	102	1/1	0.96	0.16	68,68,68,68	0
54	MG	2A	3342	1/1	0.96	0.15	44,44,44,44	0
54	MG	2A	3563	1/1	0.96	0.17	70,70,70,70	0
54	MG	1a	1626	1/1	0.96	0.08	65,65,65,65	0
54	MG	1a	1763	1/1	0.96	0.11	49,49,49,49	0
54	MG	1A	3600	1/1	0.96	0.09	53,53,53,53	0
54	MG	1a	1766	1/1	0.96	0.15	68,68,68,68	0
54	MG	1A	3421	1/1	0.96	0.22	61,61,61,61	0
54	MG	2A	3174	1/1	0.96	0.14	51,51,51,51	0
54	MG	1a	1769	1/1	0.96	0.08	58,58,58,58	0
54	MG	1a	1770	1/1	0.96	0.14	61,61,61,61	0
54	MG	1D	310	1/1	0.96	0.24	33,33,33,33	0
54	MG	2A	3354	1/1	0.96	0.15	37,37,37,37	0
54	MG	1A	3081	1/1	0.96	0.28	38,38,38,38	0
54	MG	1D	312	1/1	0.96	0.10	45,45,45,45	0
54	MG	1D	313	1/1	0.96	0.29	40,40,40,40	0
54	MG	1A	3847	1/1	0.96	0.43	56,56,56,56	0
54	MG	1a	1636	1/1	0.96	0.20	72,72,72,72	0
54	MG	2A	3360	1/1	0.96	0.18	45,45,45,45	0
54	MG	2A	3361	1/1	0.96	0.11	31,31,31,31	0
54	MG	2a	3013	1/1	0.96	0.20	61,61,61,61	0
54	MG	1A	3302	1/1	0.96	0.19	37,37,37,37	0
54	MG	1a	1779	1/1	0.96	0.03	71,71,71,71	0
54	MG	1A	3378	1/1	0.96	0.10	19,19,19,19	0
54	MG	2A	3017	1/1	0.96	0.52	41,41,41,41	0
54	MG	2A	3018	1/1	0.96	0.90	54,54,54,54	0
54	MG	2A	3368	1/1	0.96	0.13	59,59,59,59	0
54	MG	2A	3019	1/1	0.96	0.39	47,47,47,47	0
54	MG	1A	3763	1/1	0.96	0.10	46,46,46,46	0
54	MG	1A	3425	1/1	0.96	0.20	31,31,31,31	0
54	MG	1A	3606	1/1	0.96	0.14	25,25,25,25	0
54	MG	2A	3597	1/1	0.96	0.13	49,49,49,49	0
54	MG	1a	1642	1/1	0.96	0.48	65,65,65,65	0
54	MG	1a	1785	1/1	0.96	0.05	62,62,62,62	0
54	MG	1A	3303	1/1	0.96	0.14	51,51,51,51	0
54	MG	1A	3192	1/1	0.96	0.24	40,40,40,40	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3379	1/1	0.96	0.22	39,39,39,39	0
54	MG	1E	305	1/1	0.96	0.08	37,37,37,37	0
54	MG	1A	3858	1/1	0.96	0.13	45,45,45,45	0
54	MG	1A	3770	1/1	0.96	0.27	42,42,42,42	0
54	MG	2A	3199	1/1	0.96	0.20	62,62,62,62	0
54	MG	2A	3610	1/1	0.96	0.06	53,53,53,53	0
54	MG	2A	3386	1/1	0.96	0.16	41,41,41,41	0
54	MG	1A	3963	1/1	0.96	0.24	70,70,70,70	0
54	MG	1a	1649	1/1	0.96	0.10	61,61,61,61	0
54	MG	1A	3482	1/1	0.96	0.12	55,55,55,55	0
54	MG	2A	3036	1/1	0.96	0.17	76,76,76,76	0
54	MG	1F	303	1/1	0.96	0.18	36,36,36,36	0
54	MG	1A	3243	1/1	0.96	0.18	32,32,32,32	0
54	MG	1a	1654	1/1	0.96	0.18	62,62,62,62	0
54	MG	1A	3431	1/1	0.96	0.15	28,28,28,28	0
54	MG	1A	3968	1/1	0.96	0.13	57,57,57,57	0
54	MG	1a	1800	1/1	0.96	0.11	70,70,70,70	0
54	MG	1A	3774	1/1	0.96	0.10	33,33,33,33	0
54	MG	1A	3343	1/1	0.96	0.20	29,29,29,29	0
54	MG	2a	3053	1/1	0.96	0.18	61,61,61,61	0
54	MG	1a	1803	1/1	0.96	0.17	67,67,67,67	0
54	MG	1A	3215	1/1	0.96	0.42	43,43,43,43	0
54	MG	2A	3628	1/1	0.96	0.10	63,63,63,63	0
54	MG	1F	310	1/1	0.96	0.16	31,31,31,31	0
54	MG	1A	3435	1/1	0.96	0.16	35,35,35,35	0
54	MG	2A	3405	1/1	0.96	0.10	73,73,73,73	0
54	MG	1A	3387	1/1	0.96	0.24	69,69,69,69	0
54	MG	1A	3437	1/1	0.96	0.23	30,30,30,30	0
54	MG	2A	3408	1/1	0.96	0.14	51,51,51,51	0
54	MG	1A	3082	1/1	0.96	0.18	42,42,42,42	0
54	MG	1a	1666	1/1	0.96	0.18	74,74,74,74	0
54	MG	1A	3391	1/1	0.96	0.22	44,44,44,44	0
54	MG	1A	3167	1/1	0.96	0.13	41,41,41,41	0
54	MG	1A	3980	1/1	0.96	0.25	56,56,56,56	0
54	MG	2A	3418	1/1	0.96	0.23	66,66,66,66	0
54	MG	2a	3069	1/1	0.96	0.19	73,73,73,73	0
54	MG	1A	3441	1/1	0.96	0.26	27,27,27,27	0
54	MG	2A	3420	1/1	0.96	0.13	70,70,70,70	0
54	MG	1A	3561	1/1	0.96	0.12	40,40,40,40	0
54	MG	2A	3650	1/1	0.96	0.11	57,57,57,57	0
54	MG	1A	3878	1/1	0.96	0.23	33,33,33,33	0
54	MG	1A	3104	1/1	0.96	0.32	39,39,39,39	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3653	1/1	0.96	0.20	63,63,63,63	0
54	MG	2A	3424	1/1	0.96	0.24	63,63,63,63	0
54	MG	2a	3079	1/1	0.96	0.17	70,70,70,70	0
54	MG	1A	3702	1/1	0.96	0.16	77,77,77,77	0
54	MG	2A	3427	1/1	0.96	0.10	65,65,65,65	0
54	MG	1a	1676	1/1	0.96	0.17	59,59,59,59	0
54	MG	2a	3083	1/1	0.96	0.08	70,70,70,70	0
54	MG	2A	3658	1/1	0.96	0.18	60,60,60,60	0
54	MG	1A	3881	1/1	0.96	0.22	35,35,35,35	0
54	MG	1A	3703	1/1	0.96	0.37	50,50,50,50	0
54	MG	1A	3883	1/1	0.96	0.12	50,50,50,50	0
54	MG	1A	3564	1/1	0.96	0.28	57,57,57,57	0
54	MG	1A	3790	1/1	0.96	0.29	50,50,50,50	0
54	MG	2A	3665	1/1	0.96	0.09	28,28,28,28	0
54	MG	1A	3565	1/1	0.96	0.20	37,37,37,37	0
54	MG	1A	3118	1/1	0.96	0.16	41,41,41,41	0
54	MG	2A	3238	1/1	0.96	0.11	60,60,60,60	0
54	MG	2A	3239	1/1	0.96	0.89	48,48,48,48	0
54	MG	1A	3632	1/1	0.96	0.21	34,34,34,34	0
54	MG	2A	3671	1/1	0.96	0.07	75,75,75,75	0
54	MG	2a	3097	1/1	0.96	0.14	56,56,56,56	0
54	MG	1A	3889	1/1	0.96	0.07	60,60,60,60	0
54	MG	1A	3445	1/1	0.96	0.13	45,45,45,45	0
54	MG	1A	3317	1/1	0.96	0.21	36,36,36,36	0
54	MG	1A	3056	1/1	0.96	0.13	47,47,47,47	0
54	MG	1A	3281	1/1	0.96	0.38	64,64,64,64	0
54	MG	2A	3082	1/1	0.96	0.14	46,46,46,46	0
54	MG	1A	3638	1/1	0.96	0.17	35,35,35,35	0
54	MG	2A	3084	1/1	0.96	0.29	49,49,49,49	0
54	MG	1T	203	1/1	0.96	0.09	70,70,70,70	0
54	MG	1A	3356	1/1	0.96	0.19	48,48,48,48	0
54	MG	1A	3896	1/1	0.96	0.20	40,40,40,40	0
54	MG	2A	3684	1/1	0.96	0.14	41,41,41,41	0
54	MG	2a	3110	1/1	0.96	0.30	67,67,67,67	0
54	MG	2A	3685	1/1	0.96	0.20	67,67,67,67	0
54	MG	2A	3460	1/1	0.96	0.04	56,56,56,56	0
54	MG	1U	205	1/1	0.96	0.17	44,44,44,44	0
54	MG	1A	3640	1/1	0.96	0.13	56,56,56,56	0
54	MG	2a	3115	1/1	0.96	0.37	69,69,69,69	0
54	MG	2a	3116	1/1	0.96	0.17	54,54,54,54	0
54	MG	2A	3254	1/1	0.96	0.54	49,49,49,49	0
54	MG	1A	3898	1/1	0.96	0.15	63,63,63,63	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3091	1/1	0.96	0.40	60,60,60,60	0
54	MG	1A	3507	1/1	0.96	0.14	35,35,35,35	0
54	MG	1A	3900	1/1	0.96	0.09	51,51,51,51	0
54	MG	1A	3643	1/1	0.96	0.18	47,47,47,47	0
54	MG	2A	3261	1/1	0.96	0.54	50,50,50,50	0
54	MG	2A	3471	1/1	0.96	0.06	63,63,63,63	0
54	MG	2A	3262	1/1	0.96	0.24	68,68,68,68	0
54	MG	1A	3644	1/1	0.96	0.16	34,34,34,34	0
54	MG	2A	3096	1/1	0.96	0.07	63,63,63,63	0
54	MG	1A	3401	1/1	0.96	0.15	33,33,33,33	0
54	MG	1a	1846	1/1	0.96	0.18	69,69,69,69	0
54	MG	10	101	1/1	0.96	0.20	46,46,46,46	0
54	MG	1A	4011	1/1	0.96	0.12	62,62,62,62	0
54	MG	1A	3646	1/1	0.96	0.16	32,32,32,32	0
54	MG	2a	3134	1/1	0.96	0.09	67,67,67,67	0
54	MG	1A	3510	1/1	0.96	0.16	52,52,52,52	0
54	MG	2A	3481	1/1	0.96	0.16	60,60,60,60	0
54	MG	1A	3076	1/1	0.96	0.09	35,35,35,35	0
54	MG	1A	3908	1/1	0.96	0.08	55,55,55,55	0
54	MG	1A	3810	1/1	0.96	0.12	44,44,44,44	0
54	MG	1A	4019	1/1	0.96	0.18	84,84,84,84	0
54	MG	1A	3512	1/1	0.96	0.20	37,37,37,37	0
54	MG	2A	3109	1/1	0.96	0.14	59,59,59,59	0
54	MG	1a	1856	1/1	0.96	0.09	56,56,56,56	0
54	MG	1A	3173	1/1	0.96	0.12	55,55,55,55	0
54	MG	1A	3029	1/1	0.96	0.13	47,47,47,47	0
54	MG	2A	3722	1/1	0.96	0.19	57,57,57,57	0
54	MG	1A	3814	1/1	0.96	0.14	63,63,63,63	0
54	MG	2a	3150	1/1	0.96	0.12	78,78,78,78	0
54	MG	1A	3727	1/1	0.96	0.43	43,43,43,43	0
54	MG	1A	3916	1/1	0.96	0.16	34,34,34,34	0
54	MG	2A	3116	1/1	0.96	0.15	57,57,57,57	0
54	MG	2a	3154	1/1	0.96	0.10	54,54,54,54	0
54	MG	1A	3728	1/1	0.96	0.18	47,47,47,47	0
54	MG	2A	3285	1/1	0.96	0.09	38,38,38,38	0
54	MG	15	104	1/1	0.96	0.31	39,39,39,39	0
54	MG	1A	3179	1/1	0.96	0.24	56,56,56,56	0
54	MG	1A	3819	1/1	0.96	0.15	33,33,33,33	0
54	MG	1A	3139	1/1	0.96	0.21	50,50,50,50	0
54	MG	1A	3078	1/1	0.96	0.56	42,42,42,42	0
54	MG	1A	3459	1/1	0.96	0.11	33,33,33,33	0
54	MG	2A	3125	1/1	0.96	0.19	40,40,40,40	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3046	1/1	0.96	0.17	16,16,16,16	0
54	MG	2A	3507	1/1	0.96	0.08	69,69,69,69	0
54	MG	2A	3508	1/1	0.96	0.17	33,33,33,33	0
54	MG	2A	3509	1/1	0.96	0.13	69,69,69,69	0
54	MG	1A	3736	1/1	0.96	0.17	52,52,52,52	0
54	MG	2a	3170	1/1	0.96	0.25	63,63,63,63	0
54	MG	2A	3295	1/1	0.96	0.38	67,67,67,67	0
54	MG	18	102	1/1	0.96	0.33	46,46,46,46	0
54	MG	1B	214	1/1	0.96	0.13	58,58,58,58	0
54	MG	2A	3515	1/1	0.96	0.16	60,60,60,60	0
54	MG	1A	3188	1/1	0.96	0.36	45,45,45,45	0
54	MG	2A	3132	1/1	0.96	0.18	35,35,35,35	0
54	MG	1A	3826	1/1	0.96	0.17	26,26,26,26	0
54	MG	1A	3463	1/1	0.96	0.14	57,57,57,57	0
54	MG	2D	305	1/1	0.96	1.01	50,50,50,50	0
54	MG	1A	3829	1/1	0.96	0.41	44,44,44,44	0
54	MG	2A	3137	1/1	0.96	0.31	69,69,69,69	0
54	MG	2a	3184	1/1	0.96	0.23	66,66,66,66	0
54	MG	2A	3304	1/1	0.96	0.32	61,61,61,61	0
54	MG	1A	3293	1/1	0.96	0.17	41,41,41,41	0
54	MG	1a	1607	1/1	0.96	0.15	55,55,55,55	0
54	MG	2A	3140	1/1	0.96	0.31	50,50,50,50	0
54	MG	2a	3190	1/1	0.96	0.10	77,77,77,77	0
54	MG	2A	3309	1/1	0.96	0.41	53,53,53,53	0
54	MG	1A	3831	1/1	0.96	0.17	24,24,24,24	0
54	MG	2E	305	1/1	0.96	0.13	41,41,41,41	0
54	MG	1A	3465	1/1	0.96	0.10	52,52,52,52	0
54	MG	1a	1738	1/1	0.96	0.10	46,46,46,46	0
54	MG	1d	303	1/1	0.96	0.27	71,71,71,71	0
54	MG	2A	3533	1/1	0.96	0.11	45,45,45,45	0
54	MG	2F	304	1/1	0.96	0.39	49,49,49,49	0
54	MG	1A	3938	1/1	0.96	0.10	44,44,44,44	0
54	MG	2A	3316	1/1	0.96	0.25	71,71,71,71	0
54	MG	2A	3146	1/1	0.96	0.39	43,43,43,43	0
54	MG	1A	3128	1/1	0.96	0.32	53,53,53,53	0
54	MG	2A	3539	1/1	0.96	0.10	59,59,59,59	0
54	MG	1A	3164	1/1	0.96	0.34	38,38,38,38	0
54	MG	1A	3297	1/1	0.96	0.15	20,20,20,20	0
54	MG	2A	3150	1/1	0.96	0.14	72,72,72,72	0
54	MG	1a	1616	1/1	0.96	0.10	79,79,79,79	0
54	MG	2A	3323	1/1	0.96	0.25	63,63,63,63	0
54	MG	1A	3748	1/1	0.96	0.24	38,38,38,38	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1a	1745	1/1	0.96	0.20	78,78,78,78	0
54	MG	2A	3605	1/1	0.97	0.12	41,41,41,41	0
54	MG	1A	3149	1/1	0.97	0.67	35,35,35,35	0
54	MG	2A	3412	1/1	0.97	0.17	38,38,38,38	0
54	MG	1A	3403	1/1	0.97	0.22	24,24,24,24	0
54	MG	1A	3094	1/1	0.97	0.31	35,35,35,35	0
54	MG	2A	3416	1/1	0.97	0.11	63,63,63,63	0
54	MG	1A	3340	1/1	0.97	0.22	49,49,49,49	0
54	MG	1A	3061	1/1	0.97	0.18	52,52,52,52	0
54	MG	1A	3007	1/1	0.97	0.14	38,38,38,38	0
54	MG	13	101	1/1	0.97	0.17	42,42,42,42	0
54	MG	1A	3286	1/1	0.97	0.13	34,34,34,34	0
54	MG	1A	3556	1/1	0.97	0.10	39,39,39,39	0
54	MG	1A	3409	1/1	0.97	0.17	26,26,26,26	0
54	MG	1A	3637	1/1	0.97	0.26	34,34,34,34	0
54	MG	1B	208	1/1	0.97	0.12	46,46,46,46	0
54	MG	1A	3920	1/1	0.97	0.10	55,55,55,55	0
54	MG	1A	3921	1/1	0.97	0.17	21,21,21,21	0
54	MG	1A	3922	1/1	0.97	0.06	47,47,47,47	0
54	MG	17	102	1/1	0.97	0.22	42,42,42,42	0
54	MG	1A	3923	1/1	0.97	0.20	41,41,41,41	0
54	MG	1A	3236	1/1	0.97	0.40	37,37,37,37	0
54	MG	2A	3260	1/1	0.97	0.40	50,50,50,50	0
54	MG	1A	3044	1/1	0.97	0.19	38,38,38,38	0
54	MG	1A	3238	1/1	0.97	0.28	36,36,36,36	0
54	MG	2a	3034	1/1	0.97	0.25	64,64,64,64	0
54	MG	2A	3106	1/1	0.97	0.17	37,37,37,37	0
54	MG	2A	3438	1/1	0.97	0.18	65,65,65,65	0
54	MG	2A	3439	1/1	0.97	0.17	50,50,50,50	0
54	MG	1a	1862	1/1	0.97	0.09	62,62,62,62	0
54	MG	19	101	1/1	0.97	0.20	57,57,57,57	0
54	MG	2A	3637	1/1	0.97	0.06	65,65,65,65	0
54	MG	2A	3442	1/1	0.97	0.14	42,42,42,42	0
54	MG	2A	3443	1/1	0.97	0.14	44,44,44,44	0
54	MG	1A	3562	1/1	0.97	0.21	47,47,47,47	0
54	MG	2A	3445	1/1	0.97	0.13	53,53,53,53	0
54	MG	1A	3239	1/1	0.97	0.67	47,47,47,47	0
54	MG	2A	3447	1/1	0.97	0.19	63,63,63,63	0
54	MG	1A	3348	1/1	0.97	0.10	28,28,28,28	0
54	MG	1a	1868	1/1	0.97	0.10	54,54,54,54	0
54	MG	1A	3485	1/1	0.97	0.12	35,35,35,35	0
54	MG	1A	3126	1/1	0.97	0.30	66,66,66,66	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3828	1/1	0.97	0.43	38,38,38,38	0
54	MG	1a	1733	1/1	0.97	0.10	52,52,52,52	0
54	MG	2A	3454	1/1	0.97	0.20	55,55,55,55	0
54	MG	2A	3456	1/1	0.97	0.09	46,46,46,46	0
54	MG	2A	3117	1/1	0.97	0.58	58,58,58,58	0
54	MG	1A	3733	1/1	0.97	0.09	45,45,45,45	0
54	MG	1a	1735	1/1	0.97	0.17	47,47,47,47	0
54	MG	1A	3488	1/1	0.97	0.24	46,46,46,46	0
54	MG	1A	3735	1/1	0.97	0.11	31,31,31,31	0
54	MG	1A	3648	1/1	0.97	0.10	39,39,39,39	0
54	MG	1a	1611	1/1	0.97	0.18	55,55,55,55	0
54	MG	1A	3158	1/1	0.97	0.87	46,46,46,46	0
54	MG	2A	3465	1/1	0.97	0.23	45,45,45,45	0
54	MG	1a	1613	1/1	0.97	0.18	35,35,35,35	0
54	MG	1A	3079	1/1	0.97	0.32	36,36,36,36	0
54	MG	1A	3028	1/1	0.97	0.42	40,40,40,40	0
54	MG	1A	3055	1/1	0.97	0.75	41,41,41,41	0
54	MG	1A	3837	1/1	0.97	0.17	59,59,59,59	0
54	MG	1D	302	1/1	0.97	0.11	53,53,53,53	0
54	MG	2A	3131	1/1	0.97	0.14	65,65,65,65	0
54	MG	1a	1747	1/1	0.97	0.15	39,39,39,39	0
54	MG	1A	3744	1/1	0.97	0.13	59,59,59,59	0
54	MG	1A	3839	1/1	0.97	0.20	49,49,49,49	0
54	MG	2a	3076	1/1	0.97	0.27	57,57,57,57	0
54	MG	1A	3103	1/1	0.97	0.13	56,56,56,56	0
54	MG	1a	1751	1/1	0.97	0.14	62,62,62,62	0
54	MG	1f	201	1/1	0.97	0.28	75,75,75,75	0
54	MG	1A	3247	1/1	0.97	0.55	39,39,39,39	0
54	MG	1A	3066	1/1	0.97	0.10	56,56,56,56	0
54	MG	1A	3023	1/1	0.97	0.29	36,36,36,36	0
54	MG	1a	1756	1/1	0.97	0.10	59,59,59,59	0
54	MG	1A	3427	1/1	0.97	0.26	52,52,52,52	0
54	MG	1a	1758	1/1	0.97	0.12	49,49,49,49	0
54	MG	1a	1628	1/1	0.97	0.10	74,74,74,74	0
54	MG	1a	1760	1/1	0.97	0.06	64,64,64,64	0
54	MG	2A	3688	1/1	0.97	0.12	50,50,50,50	0
54	MG	1A	3500	1/1	0.97	0.19	36,36,36,36	0
54	MG	1a	1762	1/1	0.97	0.19	56,56,56,56	0
54	MG	1A	3068	1/1	0.97	0.17	46,46,46,46	0
54	MG	2A	3306	1/1	0.97	0.16	42,42,42,42	0
54	MG	1A	3253	1/1	0.97	0.11	49,49,49,49	0
54	MG	2A	3151	1/1	0.97	0.17	58,58,58,58	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3954	1/1	0.97	0.12	29,29,29,29	0
54	MG	1A	3753	1/1	0.97	0.16	49,49,49,49	0
54	MG	2A	3311	1/1	0.97	0.31	60,60,60,60	0
54	MG	2A	3698	1/1	0.97	0.08	67,67,67,67	0
54	MG	1a	1768	1/1	0.97	0.07	52,52,52,52	0
54	MG	1A	3363	1/1	0.97	0.26	28,28,28,28	0
54	MG	2A	3701	1/1	0.97	0.08	55,55,55,55	0
54	MG	1A	3085	1/1	0.97	0.75	41,41,41,41	0
54	MG	1a	1771	1/1	0.97	0.14	67,67,67,67	0
54	MG	1A	3852	1/1	0.97	0.09	41,41,41,41	0
54	MG	1A	3853	1/1	0.97	0.19	57,57,57,57	0
54	MG	2A	3003	1/1	0.97	0.12	42,42,42,42	0
54	MG	2A	3504	1/1	0.97	0.25	63,63,63,63	0
54	MG	1A	3584	1/1	0.97	0.17	52,52,52,52	0
54	MG	1A	3255	1/1	0.97	0.10	35,35,35,35	0
54	MG	1A	3760	1/1	0.97	0.26	36,36,36,36	0
54	MG	1A	3207	1/1	0.97	0.17	56,56,56,56	0
54	MG	2A	3010	1/1	0.97	0.14	40,40,40,40	0
54	MG	1A	3024	1/1	0.97	0.14	22,22,22,22	0
54	MG	1A	3137	1/1	0.97	0.43	36,36,36,36	0
54	MG	2A	3171	1/1	0.97	0.08	47,47,47,47	0
54	MG	2A	3014	1/1	0.97	0.22	39,39,39,39	0
54	MG	1A	3369	1/1	0.97	0.15	36,36,36,36	0
54	MG	2a	3118	1/1	0.97	0.21	74,74,74,74	0
54	MG	1A	3765	1/1	0.97	0.12	47,47,47,47	0
54	MG	2A	3330	1/1	0.97	0.13	44,44,44,44	0
54	MG	1A	3969	1/1	0.97	0.24	52,52,52,52	0
54	MG	1A	3370	1/1	0.97	0.15	25,25,25,25	0
54	MG	1A	3971	1/1	0.97	0.17	53,53,53,53	0
54	MG	2A	3020	1/1	0.97	0.13	43,43,43,43	0
54	MG	2A	3522	1/1	0.97	0.10	39,39,39,39	0
54	MG	1A	3312	1/1	0.97	0.50	45,45,45,45	0
54	MG	1A	3315	1/1	0.97	0.19	40,40,40,40	0
54	MG	2A	3337	1/1	0.97	0.13	67,67,67,67	0
54	MG	2A	3338	1/1	0.97	0.10	38,38,38,38	0
54	MG	1A	3138	1/1	0.97	0.28	36,36,36,36	0
54	MG	2A	3341	1/1	0.97	0.26	59,59,59,59	0
54	MG	1F	311	1/1	0.97	0.57	53,53,53,53	0
54	MG	1a	1653	1/1	0.97	0.10	48,48,48,48	0
54	MG	2A	3344	1/1	0.97	0.07	55,55,55,55	0
54	MG	1A	3112	1/1	0.97	0.26	32,32,32,32	0
54	MG	2A	3027	1/1	0.97	0.10	57,57,57,57	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3376	1/1	0.97	0.09	51,51,51,51	0
54	MG	2A	3029	1/1	0.97	0.18	32,32,32,32	0
54	MG	2a	3139	1/1	0.97	0.12	73,73,73,73	0
54	MG	1a	1792	1/1	0.97	0.09	70,70,70,70	0
54	MG	2A	3538	1/1	0.97	0.26	56,56,56,56	0
54	MG	1A	3869	1/1	0.97	0.26	40,40,40,40	0
54	MG	1a	1657	1/1	0.97	0.07	73,73,73,73	0
54	MG	1A	3213	1/1	0.97	0.46	55,55,55,55	0
54	MG	2a	3145	1/1	0.97	0.15	70,70,70,70	0
54	MG	1A	3214	1/1	0.97	0.19	46,46,46,46	0
54	MG	2A	3543	1/1	0.97	0.19	44,44,44,44	0
54	MG	1A	3872	1/1	0.97	0.09	39,39,39,39	0
54	MG	1A	3873	1/1	0.97	0.12	48,48,48,48	0
54	MG	1A	3320	1/1	0.97	0.12	34,34,34,34	0
54	MG	1A	3025	1/1	0.97	0.56	45,45,45,45	0
54	MG	1A	3174	1/1	0.97	0.12	50,50,50,50	0
54	MG	2A	3041	1/1	0.97	0.21	26,26,26,26	0
54	MG	1A	3383	1/1	0.97	0.17	42,42,42,42	0
54	MG	1N	201	1/1	0.97	0.23	48,48,48,48	0
54	MG	1A	3218	1/1	0.97	0.58	42,42,42,42	0
54	MG	2A	3364	1/1	0.97	0.21	45,45,45,45	0
54	MG	1A	3688	1/1	0.97	0.34	41,41,41,41	0
54	MG	1A	3141	1/1	0.97	0.44	48,48,48,48	0
54	MG	1A	3531	1/1	0.97	0.09	65,65,65,65	0
54	MG	1A	3454	1/1	0.97	0.15	19,19,19,19	0
54	MG	1A	3991	1/1	0.97	0.11	25,25,25,25	0
54	MG	1A	3059	1/1	0.97	0.21	27,27,27,27	0
54	MG	2A	3560	1/1	0.97	0.17	41,41,41,41	0
54	MG	1A	3785	1/1	0.97	0.12	42,42,42,42	0
54	MG	1A	3143	1/1	0.97	0.15	30,30,30,30	0
54	MG	2A	3373	1/1	0.97	0.24	49,49,49,49	0
54	MG	2a	3168	1/1	0.97	0.19	66,66,66,66	0
54	MG	1A	3270	1/1	0.97	0.25	38,38,38,38	0
54	MG	1A	3182	1/1	0.97	0.42	44,44,44,44	0
54	MG	2P	201	1/1	0.97	0.11	64,64,64,64	0
54	MG	1A	3537	1/1	0.97	0.14	28,28,28,28	0
54	MG	1A	3697	1/1	0.97	0.15	42,42,42,42	0
54	MG	2A	3569	1/1	0.97	0.13	70,70,70,70	0
54	MG	2A	3378	1/1	0.97	0.12	50,50,50,50	0
54	MG	1A	3185	1/1	0.97	0.60	41,41,41,41	0
54	MG	1T	201	1/1	0.97	0.21	63,63,63,63	0
54	MG	2A	3382	1/1	0.97	0.13	36,36,36,36	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3060	1/1	0.97	0.18	71,71,71,71	0
54	MG	1A	3699	1/1	0.97	0.14	42,42,42,42	0
54	MG	1A	3461	1/1	0.97	0.17	47,47,47,47	0
54	MG	2V	203	1/1	0.97	0.21	61,61,61,61	0
54	MG	1A	3144	1/1	0.97	0.23	41,41,41,41	0
54	MG	2a	3186	1/1	0.97	0.24	72,72,72,72	0
54	MG	1A	3274	1/1	0.97	0.27	38,38,38,38	0
54	MG	1U	203	1/1	0.97	0.39	40,40,40,40	0
54	MG	1A	3145	1/1	0.97	0.12	37,37,37,37	0
54	MG	1V	201	1/1	0.97	0.47	35,35,35,35	0
54	MG	1A	3021	1/1	0.97	0.30	40,40,40,40	0
54	MG	2a	3193	1/1	0.97	0.07	84,84,84,84	0
54	MG	1A	3618	1/1	0.97	0.07	56,56,56,56	0
54	MG	1A	3398	1/1	0.97	0.20	61,61,61,61	0
54	MG	1A	3801	1/1	0.97	0.15	31,31,31,31	0
54	MG	1W	202	1/1	0.97	0.31	48,48,48,48	0
54	MG	1A	3074	1/1	0.97	0.19	33,33,33,33	0
55	HGR	1A	4022	36/36	0.97	0.21	23,32,37,43	0
54	MG	1A	3469	1/1	0.97	0.09	63,63,63,63	0
56	ZIT	1A	4023	52/52	0.97	0.23	20,37,57,63	0
56	ZIT	2A	3731	52/52	0.97	0.27	33,45,64,67	0
54	MG	2A	3077	1/1	0.97	0.36	59,59,59,59	0
54	MG	27	102	1/1	0.97	0.29	45,45,45,45	0
54	MG	1A	3623	1/1	0.97	0.17	33,33,33,33	0
54	MG	1A	4013	1/1	0.97	0.45	42,42,42,42	0
54	MG	1A	4014	1/1	0.97	0.16	52,52,52,52	0
54	MG	1A	3624	1/1	0.97	0.19	38,38,38,38	0
54	MG	2A	3237	1/1	0.97	0.48	52,52,52,52	0
54	MG	10	104	1/1	0.97	0.13	58,58,58,58	0
54	MG	2A	3600	1/1	0.97	0.12	57,57,57,57	0
59	ZN	1Y	202	1/1	0.97	0.21	63,63,63,63	0
54	MG	1A	3625	1/1	0.97	0.57	47,47,47,47	0
54	MG	2A	3602	1/1	0.97	0.18	47,47,47,47	0
54	MG	1A	3712	1/1	0.97	0.22	43,43,43,43	0
54	MG	1A	3075	1/1	0.97	0.15	37,37,37,37	0
54	MG	1A	3263	1/1	0.98	0.20	32,32,32,32	0
54	MG	1A	3903	1/1	0.98	0.15	51,51,51,51	0
54	MG	1a	1840	1/1	0.98	0.15	81,81,81,81	0
54	MG	2A	3426	1/1	0.98	0.07	66,66,66,66	0
54	MG	2A	3050	1/1	0.98	0.13	49,49,49,49	0
54	MG	1A	3351	1/1	0.98	0.19	16,16,16,16	0
54	MG	2A	3714	1/1	0.98	0.11	65,65,65,65	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3663	1/1	0.98	0.18	54,54,54,54	0
54	MG	1A	3739	1/1	0.98	0.22	40,40,40,40	0
54	MG	1A	3524	1/1	0.98	0.21	26,26,26,26	0
54	MG	1A	3741	1/1	0.98	0.12	30,30,30,30	0
54	MG	2A	3719	1/1	0.98	0.10	47,47,47,47	0
54	MG	1F	312	1/1	0.98	0.62	51,51,51,51	0
54	MG	1A	3742	1/1	0.98	0.13	34,34,34,34	0
54	MG	1a	1625	1/1	0.98	0.09	54,54,54,54	0
54	MG	2A	3436	1/1	0.98	0.20	49,49,49,49	0
54	MG	1A	3592	1/1	0.98	0.20	31,31,31,31	0
54	MG	1a	1627	1/1	0.98	0.19	55,55,55,55	0
54	MG	2A	3575	1/1	0.98	0.16	59,59,59,59	0
54	MG	1A	3526	1/1	0.98	0.20	31,31,31,31	0
54	MG	1A	3306	1/1	0.98	0.24	35,35,35,35	0
54	MG	2A	3579	1/1	0.98	0.14	67,67,67,67	0
54	MG	1A	3135	1/1	0.98	0.43	43,43,43,43	0
54	MG	1A	3355	1/1	0.98	0.17	33,33,33,33	0
54	MG	1A	3670	1/1	0.98	0.47	52,52,52,52	0
54	MG	2A	3066	1/1	0.98	0.27	51,51,51,51	0
54	MG	1A	3917	1/1	0.98	0.21	24,24,24,24	0
54	MG	1A	3671	1/1	0.98	0.18	40,40,40,40	0
54	MG	1A	3530	1/1	0.98	0.20	25,25,25,25	0
54	MG	1A	3016	1/1	0.98	0.38	38,38,38,38	0
54	MG	2A	3071	1/1	0.98	0.18	29,29,29,29	0
54	MG	1A	3466	1/1	0.98	0.18	29,29,29,29	0
54	MG	1A	3309	1/1	0.98	0.29	63,63,63,63	0
54	MG	1A	3161	1/1	0.98	0.26	41,41,41,41	0
54	MG	1A	3115	1/1	0.98	0.21	37,37,37,37	0
54	MG	1a	1864	1/1	0.98	0.08	60,60,60,60	0
54	MG	2A	3455	1/1	0.98	0.12	40,40,40,40	0
54	MG	1A	3037	1/1	0.98	0.17	54,54,54,54	0
54	MG	1A	3414	1/1	0.98	0.18	20,20,20,20	0
54	MG	1P	202	1/1	0.98	0.25	42,42,42,42	0
54	MG	2D	303	1/1	0.98	0.73	49,49,49,49	0
54	MG	1a	1754	1/1	0.98	0.07	57,57,57,57	0
54	MG	1A	3759	1/1	0.98	0.08	28,28,28,28	0
54	MG	1A	3314	1/1	0.98	0.18	25,25,25,25	0
54	MG	1A	3048	1/1	0.98	0.15	29,29,29,29	0
54	MG	1Q	201	1/1	0.98	0.16	44,44,44,44	0
54	MG	2D	309	1/1	0.98	0.34	55,55,55,55	0
54	MG	1Q	202	1/1	0.98	0.13	34,34,34,34	0
54	MG	1A	3072	1/1	0.98	0.26	38,38,38,38	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1Q	204	1/1	0.98	0.13	42,42,42,42	0
54	MG	1Q	205	1/1	0.98	0.20	50,50,50,50	0
54	MG	1R	202	1/1	0.98	0.17	43,43,43,43	0
54	MG	1a	1764	1/1	0.98	0.15	67,67,67,67	0
54	MG	1A	3541	1/1	0.98	0.42	39,39,39,39	0
54	MG	1A	3418	1/1	0.98	0.15	29,29,29,29	0
54	MG	1A	3685	1/1	0.98	0.13	38,38,38,38	0
54	MG	2A	3340	1/1	0.98	0.16	22,22,22,22	0
54	MG	1A	3934	1/1	0.98	0.41	60,60,60,60	0
54	MG	1A	3119	1/1	0.98	0.20	34,34,34,34	0
54	MG	1A	3767	1/1	0.98	0.21	50,50,50,50	0
54	MG	1A	3017	1/1	0.98	0.24	36,36,36,36	0
54	MG	1A	3031	1/1	0.98	0.22	20,20,20,20	0
54	MG	2A	3346	1/1	0.98	0.20	42,42,42,42	0
54	MG	1A	3123	1/1	0.98	0.18	35,35,35,35	0
54	MG	1A	3102	1/1	0.98	0.40	35,35,35,35	0
54	MG	1A	3481	1/1	0.98	0.24	53,53,53,53	0
54	MG	1A	3171	1/1	0.98	0.29	41,41,41,41	0
54	MG	2A	3624	1/1	0.98	0.20	49,49,49,49	0
54	MG	2Q	203	1/1	0.98	0.21	64,64,64,64	0
54	MG	2R	201	1/1	0.98	0.43	48,48,48,48	0
54	MG	2A	3484	1/1	0.98	0.24	65,65,65,65	0
54	MG	2A	3626	1/1	0.98	0.09	28,28,28,28	0
54	MG	1U	206	1/1	0.98	0.25	37,37,37,37	0
54	MG	1A	3278	1/1	0.98	0.37	47,47,47,47	0
54	MG	2A	3228	1/1	0.98	0.65	45,45,45,45	0
54	MG	2U	201	1/1	0.98	0.18	65,65,65,65	0
54	MG	1a	1667	1/1	0.98	0.16	64,64,64,64	0
54	MG	1V	202	1/1	0.98	0.42	39,39,39,39	0
54	MG	1A	3087	1/1	0.98	0.39	41,41,41,41	0
54	MG	1A	3019	1/1	0.98	0.30	32,32,32,32	0
54	MG	1A	3946	1/1	0.98	0.09	62,62,62,62	0
54	MG	1A	3860	1/1	0.98	0.16	37,37,37,37	0
54	MG	2A	3636	1/1	0.98	0.17	56,56,56,56	0
54	MG	1A	3486	1/1	0.98	0.16	33,33,33,33	0
54	MG	1A	3326	1/1	0.98	0.10	28,28,28,28	0
54	MG	1W	204	1/1	0.98	0.10	53,53,53,53	0
54	MG	1A	3374	1/1	0.98	0.11	22,22,22,22	0
54	MG	1A	3105	1/1	0.98	0.73	40,40,40,40	0
54	MG	2A	3642	1/1	0.98	0.09	74,74,74,74	0
54	MG	1A	3206	1/1	0.98	0.27	38,38,38,38	0
54	MG	1A	3626	1/1	0.98	0.26	36,36,36,36	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2A	3645	1/1	0.98	0.20	61,61,61,61	0
54	MG	1A	3491	1/1	0.98	0.23	49,49,49,49	0
54	MG	1A	3559	1/1	0.98	0.16	40,40,40,40	0
54	MG	1A	3283	1/1	0.98	0.26	46,46,46,46	0
54	MG	1A	3434	1/1	0.98	0.20	65,65,65,65	0
54	MG	1A	3494	1/1	0.98	0.16	32,32,32,32	0
54	MG	1A	3175	1/1	0.98	0.15	35,35,35,35	0
54	MG	1A	3020	1/1	0.98	0.40	41,41,41,41	0
54	MG	1A	3209	1/1	0.98	0.18	38,38,38,38	0
54	MG	1A	3177	1/1	0.98	0.28	34,34,34,34	0
54	MG	2A	3006	1/1	0.98	0.22	46,46,46,46	0
54	MG	1A	3248	1/1	0.98	0.19	38,38,38,38	0
54	MG	1A	3178	1/1	0.98	0.18	33,33,33,33	0
54	MG	2A	3660	1/1	0.98	0.12	46,46,46,46	0
54	MG	1D	303	1/1	0.98	0.31	43,43,43,43	0
54	MG	2A	3514	1/1	0.98	0.13	43,43,43,43	0
54	MG	1A	3794	1/1	0.98	0.08	33,33,33,33	0
54	MG	2A	3381	1/1	0.98	0.21	33,33,33,33	0
54	MG	2A	3012	1/1	0.98	0.14	30,30,30,30	0
54	MG	13	103	1/1	0.98	0.11	49,49,49,49	0
54	MG	1A	3385	1/1	0.98	0.17	35,35,35,35	0
54	MG	1D	306	1/1	0.98	0.17	44,44,44,44	0
54	MG	1A	3042	1/1	0.98	0.19	30,30,30,30	0
54	MG	1A	3091	1/1	0.98	0.10	40,40,40,40	0
54	MG	1A	3388	1/1	0.98	0.15	52,52,52,52	0
54	MG	1A	3642	1/1	0.98	0.16	63,63,63,63	0
54	MG	2A	3525	1/1	0.98	0.10	65,65,65,65	0
54	MG	2a	3022	1/1	0.98	0.07	74,74,74,74	0
54	MG	2A	3390	1/1	0.98	0.14	35,35,35,35	0
54	MG	1A	3718	1/1	0.98	0.08	38,38,38,38	0
54	MG	17	101	1/1	0.98	0.16	38,38,38,38	0
54	MG	2A	3393	1/1	0.98	0.14	45,45,45,45	0
54	MG	1a	1702	1/1	0.98	0.35	66,66,66,66	0
54	MG	1A	3181	1/1	0.98	0.18	53,53,53,53	0
54	MG	17	103	1/1	0.98	0.33	40,40,40,40	0
54	MG	17	104	1/1	0.98	0.29	33,33,33,33	0
54	MG	1A	3339	1/1	0.98	0.14	34,34,34,34	0
54	MG	2a	3032	1/1	0.98	0.14	77,77,77,77	0
54	MG	2A	3683	1/1	0.98	0.08	62,62,62,62	0
54	MG	2a	3191	1/1	0.98	0.12	63,63,63,63	0
54	MG	1A	3575	1/1	0.98	0.17	36,36,36,36	0
54	MG	1A	3109	1/1	0.98	0.31	48,48,48,48	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	1A	3216	1/1	0.98	0.76	45,45,45,45	0
54	MG	1A	3183	1/1	0.98	0.23	34,34,34,34	0
54	MG	2A	3152	1/1	0.98	0.29	64,64,64,64	0
54	MG	2a	3039	1/1	0.98	0.05	86,86,86,86	0
54	MG	1A	3043	1/1	0.98	0.20	26,26,26,26	0
54	MG	1A	3299	1/1	0.98	0.17	35,35,35,35	0
54	MG	1A	3651	1/1	0.98	0.19	51,51,51,51	0
54	MG	1E	301	1/1	0.98	0.39	38,38,38,38	0
54	MG	1A	3155	1/1	0.98	0.25	36,36,36,36	0
54	MG	2a	3045	1/1	0.98	0.13	74,74,74,74	0
54	MG	2A	3158	1/1	0.98	0.06	70,70,70,70	0
54	MG	2A	3410	1/1	0.98	0.16	51,51,51,51	0
54	MG	2A	3159	1/1	0.98	0.21	49,49,49,49	0
54	MG	1E	304	1/1	0.98	0.18	28,28,28,28	0
54	MG	1A	3582	1/1	0.98	0.39	49,49,49,49	0
54	MG	1A	3221	1/1	0.98	0.24	28,28,28,28	0
54	MG	1A	3005	1/1	0.98	0.19	28,28,28,28	0
54	MG	1A	3456	1/1	0.98	0.15	47,47,47,47	0
54	MG	1E	309	1/1	0.98	0.19	54,54,54,54	0
54	MG	1A	3400	1/1	0.98	0.22	36,36,36,36	0
54	MG	1F	302	1/1	0.98	0.27	38,38,38,38	0
54	MG	1A	3157	1/1	0.98	0.33	44,44,44,44	0
59	ZN	26	501	1/1	0.98	0.19	66,66,66,66	0
54	MG	1A	3013	1/1	0.98	0.23	20,20,20,20	0
59	ZN	2n	501	1/1	0.98	0.09	95,95,95,95	0
54	MG	1A	3966	1/1	0.99	0.12	50,50,50,50	0
54	MG	1A	3184	1/1	0.99	0.14	35,35,35,35	0
54	MG	1A	3018	1/1	0.99	0.24	27,27,27,27	0
54	MG	1E	303	1/1	0.99	0.25	35,35,35,35	0
54	MG	1A	3428	1/1	0.99	0.14	34,34,34,34	0
54	MG	1A	4004	1/1	0.99	0.17	18,18,18,18	0
54	MG	1A	3006	1/1	0.99	0.12	27,27,27,27	0
54	MG	1A	3662	1/1	0.99	0.16	34,34,34,34	0
54	MG	1A	3525	1/1	0.99	0.18	23,23,23,23	0
54	MG	25	103	1/1	0.99	0.24	61,61,61,61	0
54	MG	1A	3111	1/1	0.99	0.31	32,32,32,32	0
54	MG	1A	3352	1/1	0.99	0.23	38,38,38,38	0
54	MG	2A	3589	1/1	0.99	0.15	41,41,41,41	0
54	MG	1F	301	1/1	0.99	0.14	37,37,37,37	0
54	MG	1R	201	1/1	0.99	0.19	41,41,41,41	0
54	MG	1A	3410	1/1	0.99	0.23	27,27,27,27	0
54	MG	1R	203	1/1	0.99	0.17	53,53,53,53	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	2a	3176	1/1	0.99	0.16	56,56,56,56	0
54	MG	1A	3754	1/1	0.99	0.23	48,48,48,48	0
54	MG	2a	3178	1/1	0.99	0.07	63,63,63,63	0
54	MG	1A	3390	1/1	0.99	0.12	27,27,27,27	0
54	MG	2A	3647	1/1	0.99	0.15	36,36,36,36	0
54	MG	2A	3648	1/1	0.99	0.14	34,34,34,34	0
54	MG	2A	3702	1/1	0.99	0.33	62,62,62,62	0
54	MG	15	101	1/1	0.99	0.26	31,31,31,31	0
54	MG	2E	301	1/1	0.99	0.13	60,60,60,60	0
54	MG	1A	3911	1/1	0.99	0.15	25,25,25,25	0
54	MG	2E	303	1/1	0.99	0.11	55,55,55,55	0
54	MG	15	103	1/1	0.99	0.24	34,34,34,34	0
54	MG	1A	3001	1/1	0.99	0.14	38,38,38,38	0
54	MG	1A	3242	1/1	0.99	0.35	38,38,38,38	0
54	MG	1A	3849	1/1	0.99	0.17	26,26,26,26	0
54	MG	2F	301	1/1	0.99	0.36	43,43,43,43	0
54	MG	1A	3818	1/1	0.99	0.11	46,46,46,46	0
54	MG	1A	3049	1/1	0.99	0.25	60,60,60,60	0
54	MG	1A	3231	1/1	0.99	0.30	39,39,39,39	0
54	MG	1A	3220	1/1	0.99	0.13	32,32,32,32	0
54	MG	1A	3508	1/1	0.99	0.16	33,33,33,33	0
54	MG	1U	204	1/1	0.99	0.26	32,32,32,32	0
54	MG	2A	3413	1/1	0.99	0.12	43,43,43,43	0
54	MG	2t	201	1/1	0.99	0.12	53,53,53,53	0
54	MG	2A	3039	1/1	0.99	0.17	54,54,54,54	0
54	MG	1A	3003	1/1	0.99	0.13	31,31,31,31	0
54	MG	1A	3275	1/1	0.99	0.63	37,37,37,37	0
54	MG	2A	3134	1/1	0.99	0.08	77,77,77,77	0
54	MG	1A	3154	1/1	0.99	0.57	40,40,40,40	0
54	MG	1A	3122	1/1	0.99	0.23	33,33,33,33	0
54	MG	1V	203	1/1	0.99	0.17	48,48,48,48	0
54	MG	1A	3096	1/1	0.99	0.19	21,21,21,21	0
54	MG	1A	3622	1/1	0.99	0.20	63,63,63,63	0
54	MG	2A	3567	1/1	0.99	0.10	59,59,59,59	0
54	MG	1A	3514	1/1	0.99	0.19	46,46,46,46	0
54	MG	1a	1603	1/1	0.99	0.13	51,51,51,51	0
54	MG	1A	3444	1/1	0.99	0.12	19,19,19,19	0
54	MG	1A	3381	1/1	0.99	0.13	22,22,22,22	0
54	MG	1A	3250	1/1	0.99	0.25	36,36,36,36	0
59	ZN	15	109	1/1	0.99	0.27	48,48,48,48	0
59	ZN	16	501	1/1	0.99	0.24	45,45,45,45	0
59	ZN	19	103	1/1	0.99	0.21	46,46,46,46	0

Continued on next page...

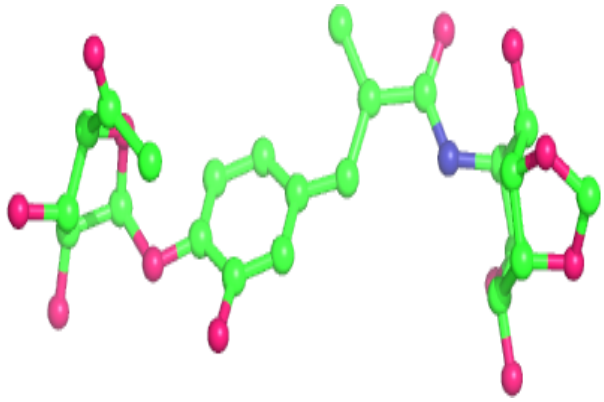
Continued from previous page...

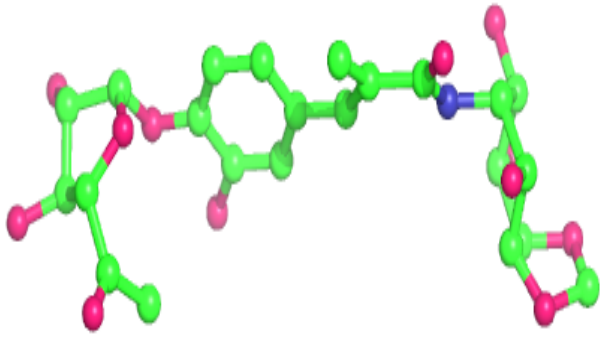
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
59	ZN	1n	103	1/1	0.99	0.12	67,67,67,67	0
54	MG	1A	3518	1/1	0.99	0.14	47,47,47,47	0
54	MG	1A	3296	1/1	0.99	0.19	23,23,23,23	0
59	ZN	25	104	1/1	0.99	0.21	54,54,54,54	0
54	MG	1A	3313	1/1	0.99	0.16	45,45,45,45	0
54	MG	2A	3576	1/1	0.99	0.17	27,27,27,27	0
54	MG	2A	3009	1/1	0.99	0.14	58,58,58,58	0
60	SF4	1d	305	8/8	0.99	0.16	63,70,75,78	0
60	SF4	2d	501	8/8	0.99	0.16	72,83,85,87	0
54	MG	1A	3288	1/1	1.00	0.44	44,44,44,44	0

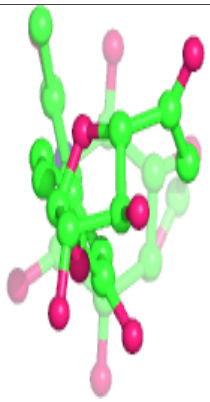
The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the geometry validation Tables will also be included. Each fit is shown from different orientation to approximate a three-dimensional view.

Electron density around HGR 2A 3730:

$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

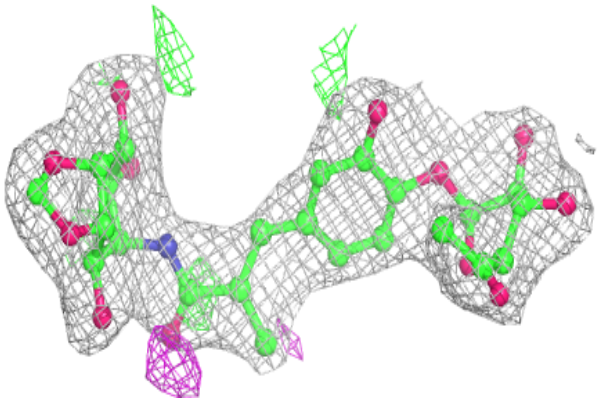


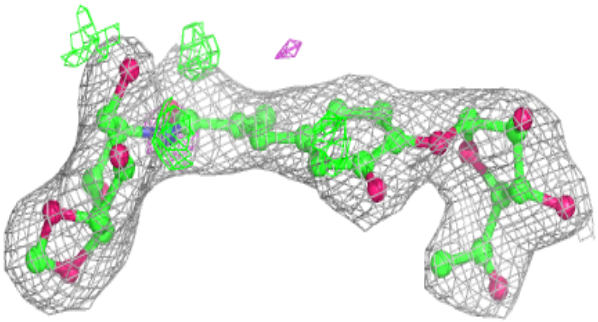


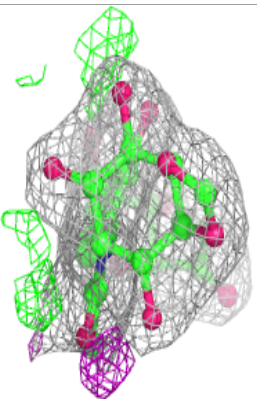


Electron density around HGR 1A 4022:

$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

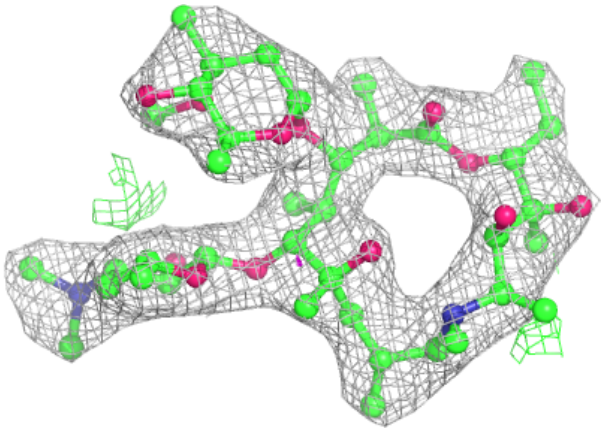


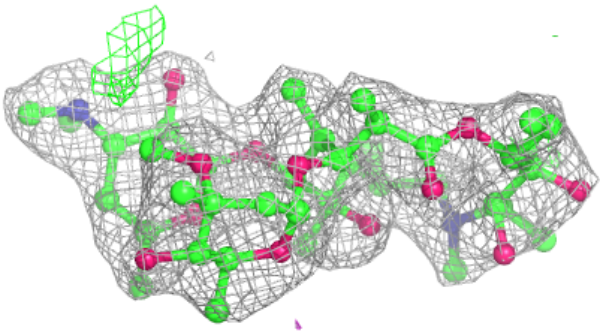


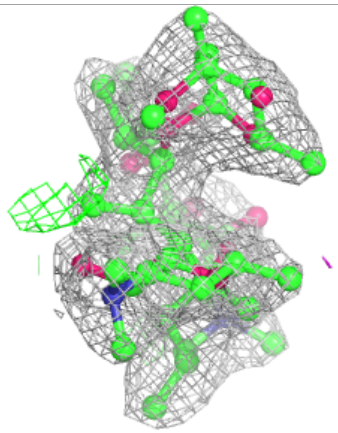


Electron density around ZIT 1A 4023:

$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

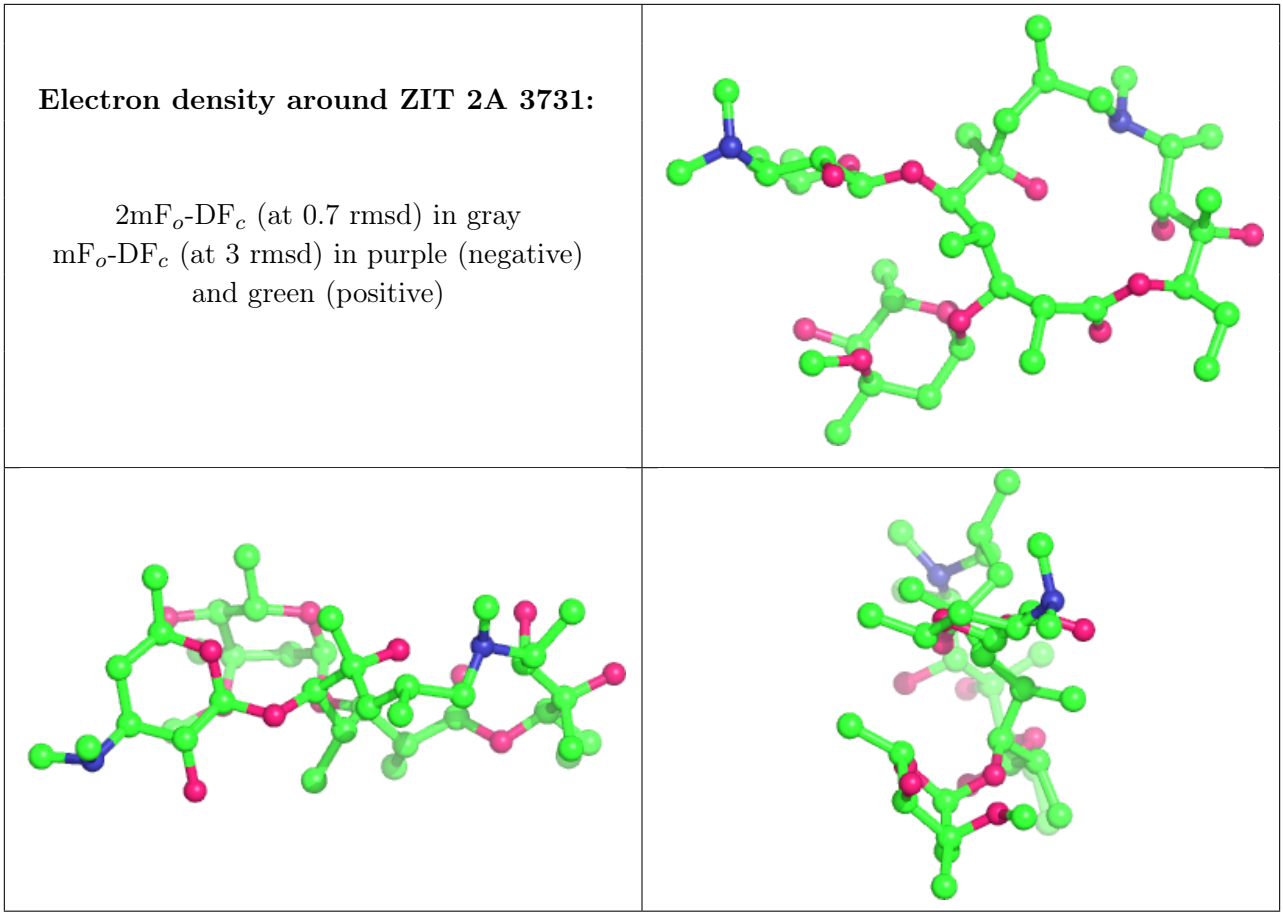






Electron density around ZIT 2A 3731:

$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)



6.5 Other polymers

There are no such residues in this entry.